# Digital Satellite Receiver TouchBOX 2

3500 channels

Parental Control

2 Scarts

DiSEqC 1.2

Timer

MET447

METRONIC

www.metronic.com

# CAUTION

Your TouchBOX 2 has ventilation slots. These slots must not be obstructed, even partially, in order to ensure proper ventilation. The lifetime and normal functioning of your device depends on these factors. Installation in premises which are confined or subject to temperature or dampness changes (sheds, attics, cellars, tiny rooms, dry risers etc.) may cause an overheating of the device or a premature ageing resulting in failures that are not covered by the guarantee.

Never open the TouchBox 2 receiver even when it is not connected, because it contains electrical components, which can be dangerous for you. In general electrical appliances are not connecting to earth, so you can get electrical discharge (which is not risky), while implemented the connections. Our advice is to connect the equipment after all the sockets connections have been made.

To clean the receiver or his remote control does not use any solvent or detergent. Only use a dry cloth for dust or slightly dampened with water for the front face. Always carry out this operation after disconnecting the receiver from the main socket and from the satellite coaxial cable.

**For your own safety:**
Never open the device. It contains no item that can be fixed by the user. If you open it, make some changes on circuits or connections of non-compliant equipment it will cancel the guarantee. Please return it for maintenance or repair to the point of sale if the device is under guarantee, or to a qualified technician, if it is no longer under warranty. In order to reduce the risks of fire, electrocution or damage caused to another equipment or someone, do not expose the device to dampness, bad weather, dust, sand, radio electric radiation, sun, cold or high temperature. You must use the device between 0°C to 40°C; 32°F to 104°F. Regarding to the location, please avoid putting fabric, paper (magazines), plastic bags, a vase etc. Place your Digital Satellite receiver in a dry place, safe from dust. It is not designed for outdoor use.

The remote control needs two AA 1.5V batteries. Check the polarity before fitting them into the remote control. Do not throw your used battery in the bins; take them to your local store where special boxes are provided to recycle them.

The installation and the use of the receiver are based on pre-programmed channels. In the event of problem on a channel, get a specialized magazine to find out if this channel is still Free To Air. For information, the operators frequently change the channel's characteristics without notice.

Your receiver is compatible with DiSEqC 1.2; it could be used then with a DiSEqC 1.2 motor (or rotator). In case of a DiSEqC 1.2 motorized installation, our advice is to install the engine in an easily accessible location (avoid chimneys, for example). Indeed, an engine may have to be screwed up or lubricated... An installation in a not very accessible place would be difficult for you. For your information, the DiSEqC standard is a trademark by Eutelsat.

If you only have one digital tuner, you will not be able to record a different satellite channel from the one you are watching. So we advise you to keep your terrestrial aerial if you have already one.

Some channels, even if they are broadcasted Free To Air (you do not need a subscription) are only for adults. To preserve your children of watching it, we advise you to install a parental control and block these channels.

- The receiver's programming will have to go through menus. For an easy use of this User Manual and for a more friendly use of the user's manual we put it as: MENU / **menu / sub-menu.**

  For example, when you read:

  - Go in MAIN MENU / **Installation / LNB & switches setup**,

  it is equivalent to :

  - Press on MAIN MENU to go to the main menu.
  - Press on ▼ key to select the **Installation** menu.
  - Press on OK to validate.
  - Press on ▼ key to selct the sub-menu / **LNB & switches setup**
  - Press on OK to validate.

- You will notice that the words in bold in this user manual are the same than in the MENU which appeared on the screen of your television.

⚠ This symbol is used on several occasions in this user manual. Pay the necessary attention to it, the text point out by it is very important.

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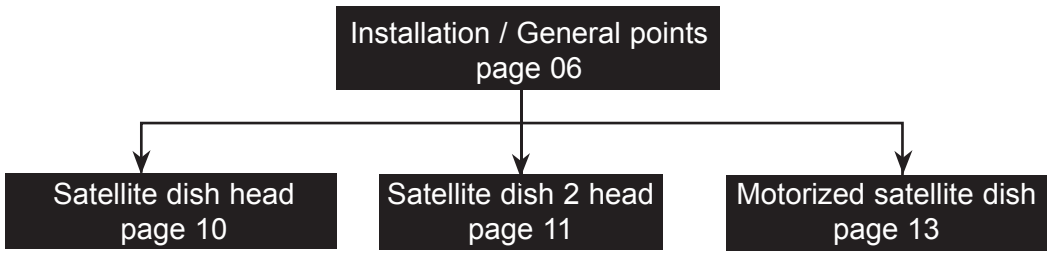
**installation shortcut:**

Purchase of the receiver alone → page 28
(your satellite is already aligned)

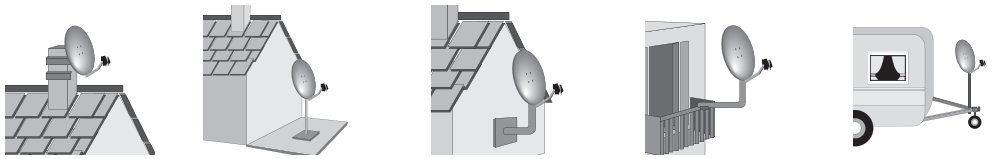
Purchase of the receiver + satellite dish:



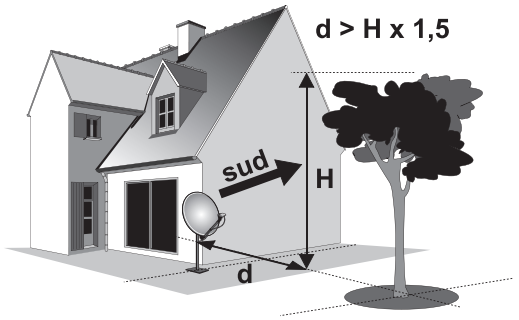
# 1 - Installation - General installation advice

## A - Choice of the location and satellite dish assembling

Whatever your choice of installation, your fixing must be stable and vertical.



In the event of an obstacle, respect the rule of distances explained below

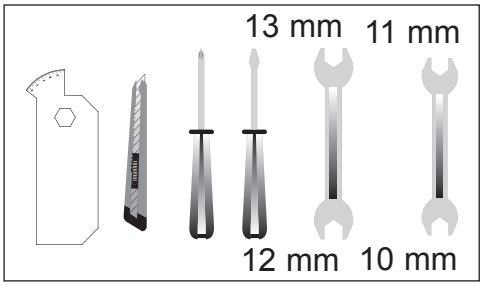



Example: if your satellite dish is 2m above the ground, and a building, or a tree, with 10 m high might obstruct, then the buildings needs to be at more than 12m.

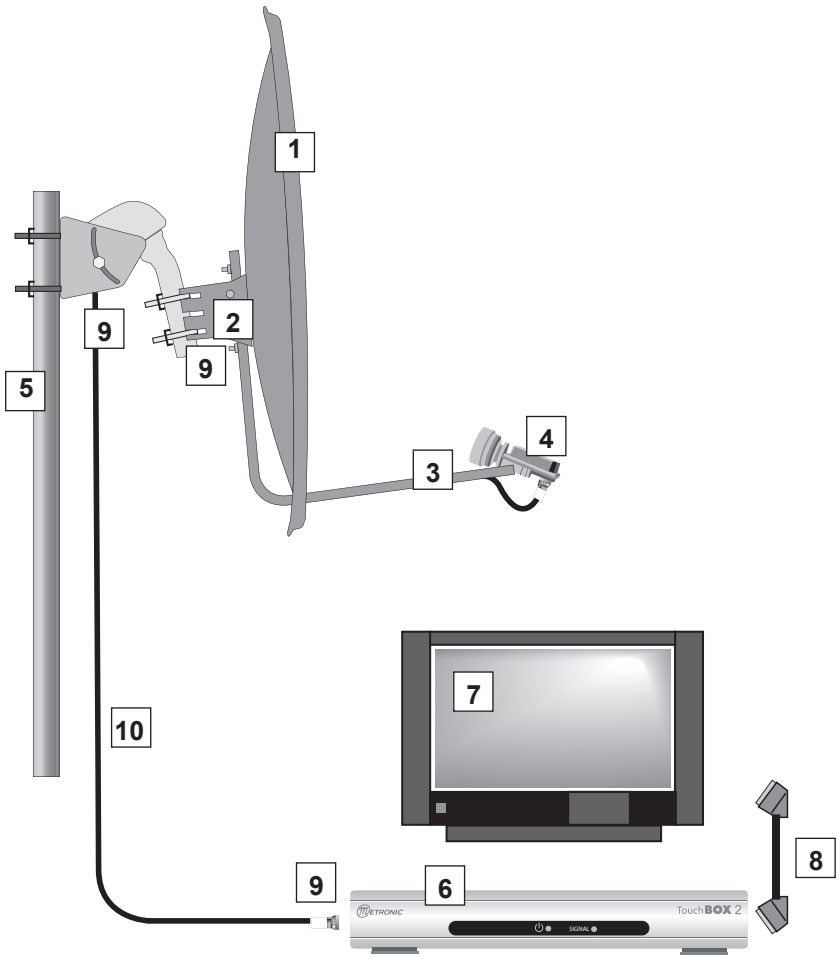
For the satellite dish assembly, look in the user manual provided in the satellite dish screw bag.

⚠ CAUTION: Please handle the satellite dish with precaution because his surround may be sharp.

## B - Necessary parts and tools :



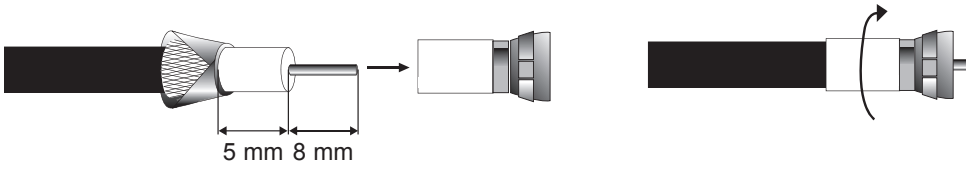

1 Satellite dish
2 Screws and fixing
3 Offset arms
4 Universal LNB
5 Pole or wall mmounting bracket of Ø minimum recommended : 40 mm
6 Digital satellite receiver with remote control
7 TV PAL or PAL/ SECAM
8 Scart lead 21 pins
9 «F» plug
10 Special satellite cable, ⚠ the standard TV cable is not appropriate.



## C - Assembly and insulation of the «F» plug

- The plug must be screwed on the strip iron aluminium, which you have peeled back on the exterior cable. Take care that there is not a strand of the braid in contact with the central heart of the coaxial cable.
- When your installation is finished, do not forget to isolate the LNB with insulation paste or in case use some silicone gel (see picture opposite).

LNBs badly insulated or not insulated at all are not covered by the guarantee.




## D - LNB's assembly

- Your kit can contain various types of LNB
- LNB in metal grey (D1 schema): make sure to position the triangular mark (▲) properly upwards. It is normal that the body of the head is tilted on 45°, the cable leaves tilted to 45°.
- Another LNB (graduations): must be positioned vertically. See D2 schema (the cable leaves vertically).
- Install the LNB at the end of the offset arm (see example below)
  In both cases, never remove the protection cap of the horn.

## E - Pre-programmed channels and satellites

Your receiver is delivered pre-programmed on the main satellites available in Europe. Some satellites require a one-meter satellite dish; you will not be able to receive them with a lower size satellite dish, even if this satellite appears in your pre-programmed channels list. You will use these channels to point your satellite dish towards the satellite you want. The Table 1 gives you the satellite dish necessary size, in **the United Kingdom and the Republic of Ireland**, for each satellite, as well as references channel that will be useful for you to align with a satellite.

**Table 1: references' channel**

(*) The channels numbers apply to the TV list at output of factory. If you modify the programming, these channels numbers are not valid any more.

| n° | Name | Position | Ø mini | Channel N° | Channel name | TP (freq / SR /pol) |
|---|---|---|---|---|---|---|
| **1** | Atlantic Bird 3 | 5°W | 60 cm | 482 | BR TV | 12543 / 27500 / H |
| **3** | Astra 19 | 19,2°E | 60 cm | 231 | TV 5 | 11568 / 22000 / V |
| **4** | Hot Bird | 13°E | 60 cm | 039 | ZDF | 11054 / 27500 / H |
| **5** | Eutelsat W2 | 16°E | 95 cm | 485 | SNAI SAT | 12608 / 27500 / H |
| **7** | Tuksat 1C | 42°E | 80 cm | 561 | TRT1 | 11096 / 27500 / V |
| **8** | Astra 28 | 28,2°E | 60 cm | 337 | BBC ONE | 10773 / 22000 / H |
| **9** | Hispasat 1A | 30°W | 80 cm | 505 | TV GALICIA | 11811 / 27500 / V |
| **10** | Arabsat 2A3A | 26°E | 100 cm | 525 | Kuwait | 11747 / 27500 / V |
| **11** | Sirius 2 | 5°E | 80 cm | 499 | Moscow o. w. | 12380 / 27500 / H |
| **12** | Eutelsat W3 | 7°E | 85 cm | 503 | M6 Suisse | 11283 / 27500 / V |

Important notes:

Table 1 does not mention the satellites which do not emit (or with a very low signal) on Digital Free to Air. The reference channels were validated at the time of drafting this user manual, we cannot guarantee they will still be there. In the event of a problem at the time of the search for a satellite, get specialized magazines (like What satellite and Digital TV) to check that the reference channel is still a Free to Air channel.
For the alignment, you must imperatively know which satellite you wish to receive. If you have any doubt check the pre-programmed channels at the end of this user manual. You will then be able to choose the satellite depending on the channel that you wish.

## F - Choice of language

When you start your receiver for the first time, you need to select the language you want with the arrows ▲ ▼ and then validate by OK. If you do not have the choice, we strongly advise you to reset the receiver (see §15). You have to do this choice, as well, after resetting the receiver.

# 2 - Installation of a fixed dish on a satellite

## A - Connections

The receiver must be disconnected from the power supply, connect directly the LNB to the receiver LNB input. Connect the television to the receiver scart socket output. Switch on the television and connect the receiver to the power supply. Press on the ⏻ key on the remote control, the green LED ignites.
If the television does not display a black screen with a message " No signal or bad signal ", checks the scart leads connections and/or force the A/V or EXT mode of your television (see your TV user manual).

## B - Alignment / Satellite dish orientation

Find in Table 1 (page 9) the satellite reference channel number that you wish to receive. Type on the remote control this channel number.

- Press on the remote control INFO key to show the reception gauge quality level at the bottom of the screen. This indicator indicates normally 0% quality; the alignment will consist in directing the satellite dish toward the satellite, which receives the maximum signal then the quality. The maximum level is not important. What is important is the variation. When you approach a satellite the level increase. When the quality increase, that means generally that you are on the right satellite.
- Put the satellite dish vertically (the graduations on the back indicate 20-25°) and roughly direct it towards the south. Make a slow sweeping (about 20 seconds) of a quarter of spin on the left then a quarter of spin on the right while checking on the television. The indicator should not show anything at this stage.
- Incline the satellite dish by 2 degrees (about 2cm on the top of the satellite dish) towards the top and then start again the sweeping.
- Proceed by 2 degrees step until the indicator goes up and that the channel appears. Tighten all the screws definitively, except those which fix the LNB in its support. If the indicator increases, but no images appear on the screen, you are on another satellite, it is necessary to continue sweeping.

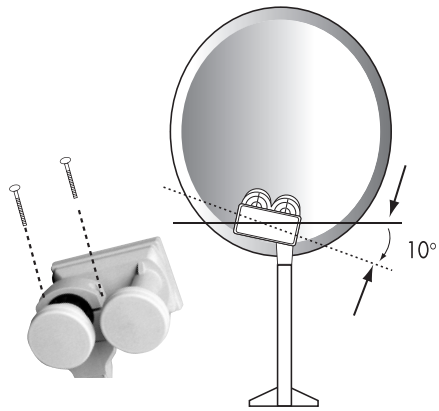
## C - Adjustment of counter polarization

Spin the LNB clockwise in its support for a few degrees to further increase the level of signal. If the signal decreases, spin it in the other way. Once you obtain the best signal, tighten definitively the screws from the LNB. Your installation is finished. Press on EXIT to erase the information banner. You can now watch all the satellite channels from the satellite you just aligned your satellite dish on.

# 3 - Installation on several satellites

## A - Installation of a bi-head satellite dish Astra 19.2 + HotBird

If the receiver is in factory adjustment (new or after a reset), you do not have to modify the programming to install a Monobloc. In that case, install the Monobloc as indicated on the pictures opposite, and align the satellite dish on Hotbird as explained in the preceding paragraph. For the general case, this paragraph explains how to program the receiver for a Monobloc or any switch.




- Go in the menu **Installation** / **LNB Setup**.
- On the line **LNB**, select **LNB2** with the keys ◂ ▸.
- Check that the line **DiSEqC input** indique **2**.

Programming

- Go into MENU / **Installation** / **LNB Setup**
- Go onto **Satellite line** and then press OK to show the satellite list.
- Select **Hot Bird** and validate by OK.
- Go onto **LNB**, select **LNB1** with arrows ◂ ▸.
- Go onto the **Satellite** line and press on OK to make the satellite list to appear.
- Select **Astra 19°** then validate by OK.
- On the line **LNB**, select **LNB2** with the keys ◂ ▸.
- Press on EXIT to leave all the menus.

Alignment

- Install the monobloc as schematised above.
- Do the alignment on HotBird like on a fixed dish (see preceding page).
- Check that you receive the Astra channels.
- If necessary, refine the alignment to receive properly the both satellites.
  You can now watch the pre-programmed channel on Astra 19.2 and Hot Bird (see «Day to day use» page 30).

⚠ Warning : some monoblocs have a reversed command. It might be necessary sometimes to reverse **1** et **2**.

## B - Installation of a switch

If you install 2 satellite dishes, or more, you need to connect all the LNB head to a switch to run only one cable.
Install and align each satellite dish like they were alone, by connecting directly his LNB to the receiver input.
When all the dishes are installed and aligned, modify the receiver programming (see underneath) to associate each satellite to the right switch input.

Example of satellite reception for Astra and HotBird. Astra is on the B input and HotBird on the A input:

Programming
- Go into MENU / **Installation** / **Channel Setup**
- Go onto the line **Satellite** and press on OK to make the satellite list to appear. Select **Hot Bird** then validate by OK.
- Go onto **LNB**, select **LNB1** with the keys ◂ ▸.
- Go onto **Satellite** and press on OK to make the satellite list to appear. Select **Astra 19°** and validate by OK.
- On the line **LNB**, select **LNB2** with the keys ◂ ▸.
- Press on EXIT to leave all the menus.

✍ You can now watch the channels from Astra 19 and HotBird (see “Day to Day use” page 30).

# 4 - Installation of a motorised unit

**A - Foreword**

This user manual shows you how to install a motorized unit with the motor, ref: 450907-8. Such installation requires some operations, on the motor and on the satellite receiver with which it is supposed to work. To ease the read of this procedure, we have written it in two parts. The first describe the repetitive operations that you have to do with the receiver. In the second part (installation as such), these operations will simply be quoted and pinpointed by a figure.

## 1 - Put the receiver on the satellite reference channel

Put the receiver on the satellite reference channel. Go into the paragraph 1E (page 9) and then locate the satellite reference channel. In case this channel is not valid anymore, choose, when it is possible, any channel with a debit (SR) above 20000.

## 2 - Go into the menu DiSEqC 1.2

If it is not done already, go into Menu / **Installation / Antenna type.** On the first line, choose “moved” with the key  and press on EXIT. Go into MENU / **Installation / Channel setup** / Dish Position, press on OK.

## 3 - Reset the motor

- In the menu DiSEqC 1.2 (see above), scroll down onto the line **Other Commands**.
- Select **Goto ref** with the key ◂ ▸ and press on OK.

## 4 - Continuous rotation

- In the menu DiSEqC 1.2 (see above), scroll down on the line **continuously moving**.
- Press once on ▸ to start the sweeping towards the right (towards the west). Another press stops the motor. The use of the key ◂ makes it spin a step towards the east. If the line **Auto Stop** is setup as **On**, the motor stops as soon as it gets a quality signal.

## 5 - Step by step rotation

- In the menu DiSEqC 1.2 (see above), scroll down on the line **move steps**.
- Press on ▸ to make the motor spin a step towards the right (towards the west).
- The use of the key ◂ makes it spin a step towards the east.

## 6 - Gives a number to a satellite

- Go into Menu / **Installation / Channel Setup**
- Scroll down on the line **Satellite Number** and choose the number with the arrows.

  ✍If you choose a number already used by another satellite, a bottom line message will indicate it to you for 3 seconds. In case of a doubt, use the number given in the picture paragraph 1E (page 9).
- Press on OK.

## 7 - Memorised the satellite position

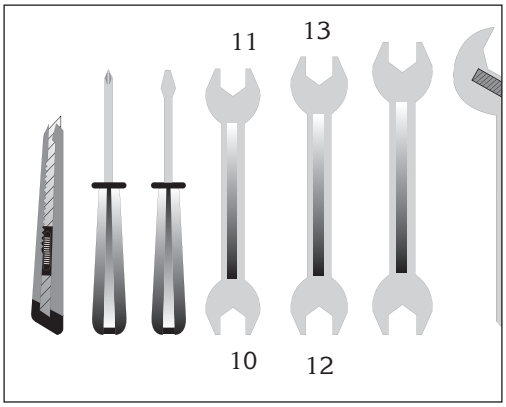
In the menu DiSEqC 1.2 (see above), if you are either on line **continuously moving** or **move steps**, a press on OK memorise the actual position.

## 8 - Display the level indicator

Press on the key Info on the remote control to display the level and quality indicator. This indicator shows normally 0% in quality; the alignment will be to orientate the satellite dish to get the maximum level of signal then the quality. The maximum level is not important. What it is important it’s the variation. When you get close to a satellite, the level increase. When the quality increase, that means generally that you are on the right satellite.

## B - Necessary elements

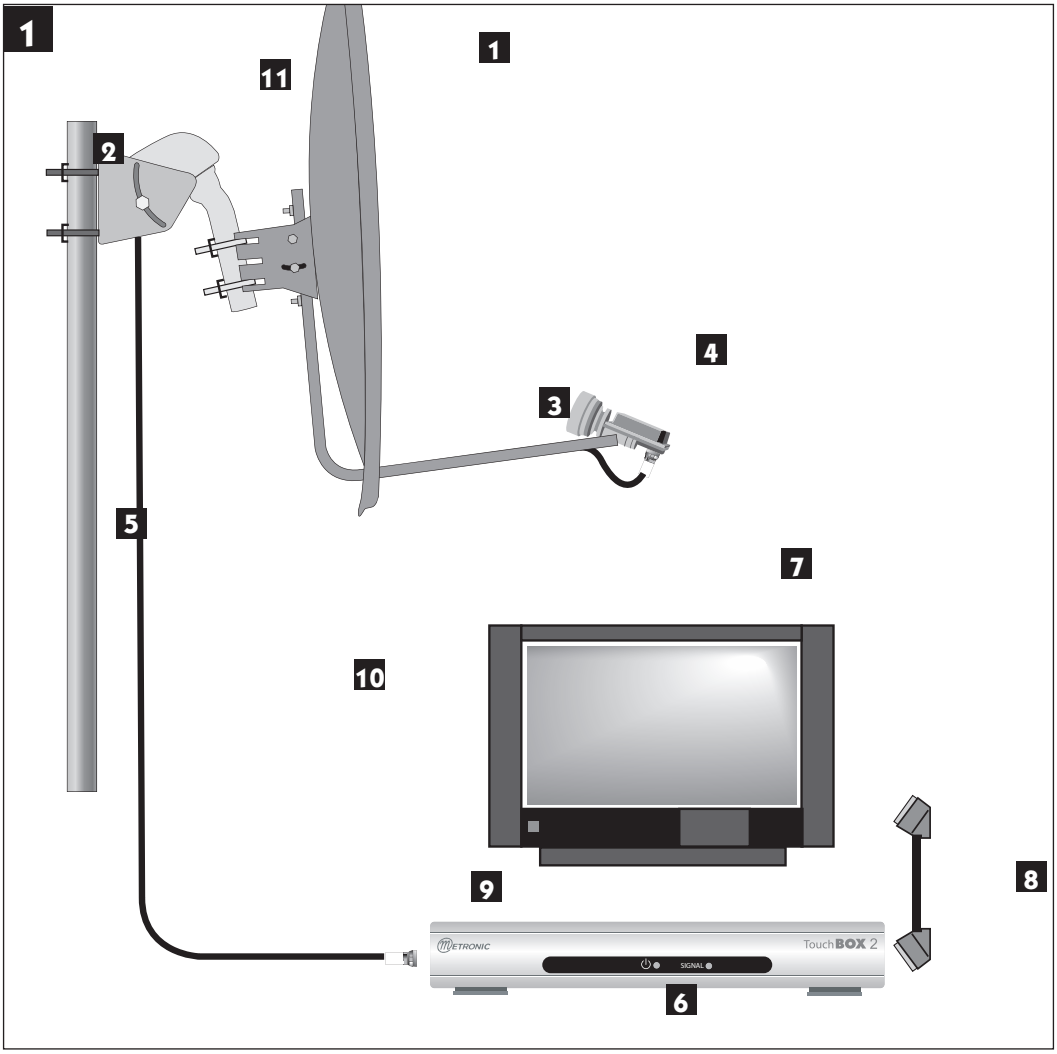
Necessary tools:




Elements:

1 Satellite dish
2 Screw and fixing
3 Offset arm
4 Universal LNB
5 Mast or stand off arm Recommended diameter minimum: 40 mm (1,6")
6 Satellite receiver
7 TV set PAL for digital reception and PAL/SECAM for analogue (to be able to watch it in colour)
8 Scart lead male/male 21 pin
9 «F» plug
10 Cable special for satellite, (regular TV cable may not work) !
11 Motor 450907

Note : for the motor itself, only a 13 mm spanner is necessary.



## C- Prepare the motor (see diagram 2)

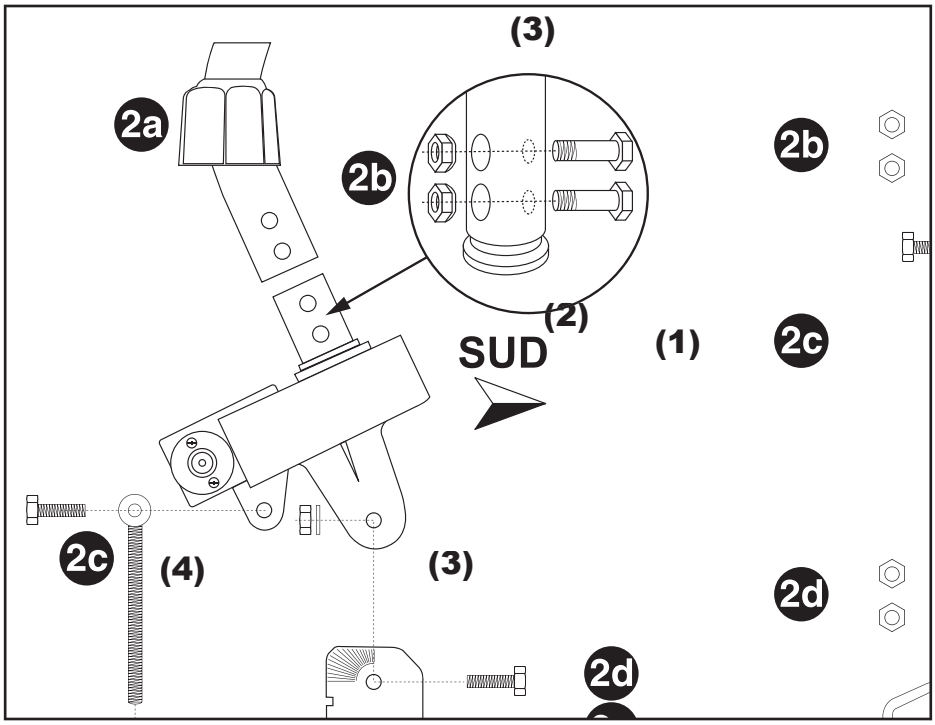
## Assembling

- Make sure the fixing (tube or stand off arm) is stable and strictly vertical. An error bigger than 1 degree (2 cm, or 3/4 inch per meter) from the vertical will preclude the motor for working properly. If necessary, add some block between the wall and the fixing. Check the verticality with a spirit level or a plumb line.

- Assemble together the parts of the motor (diagram 2). Put first the U-screws (1) through the part (2). While assembling the part (2) with the body, pay attention to the washer (3) : the part labelled «down» must be placed on the bottom, as shown on the picture.

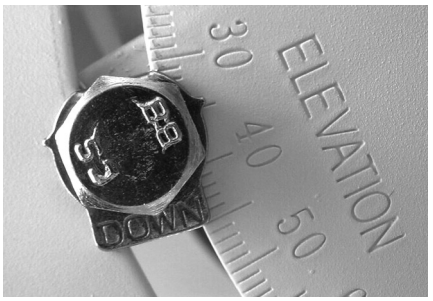
- Once the motor is assembled, do not fix it straight away on the mast or the stand off arm, some operations needs to be done near the receiver first.

2

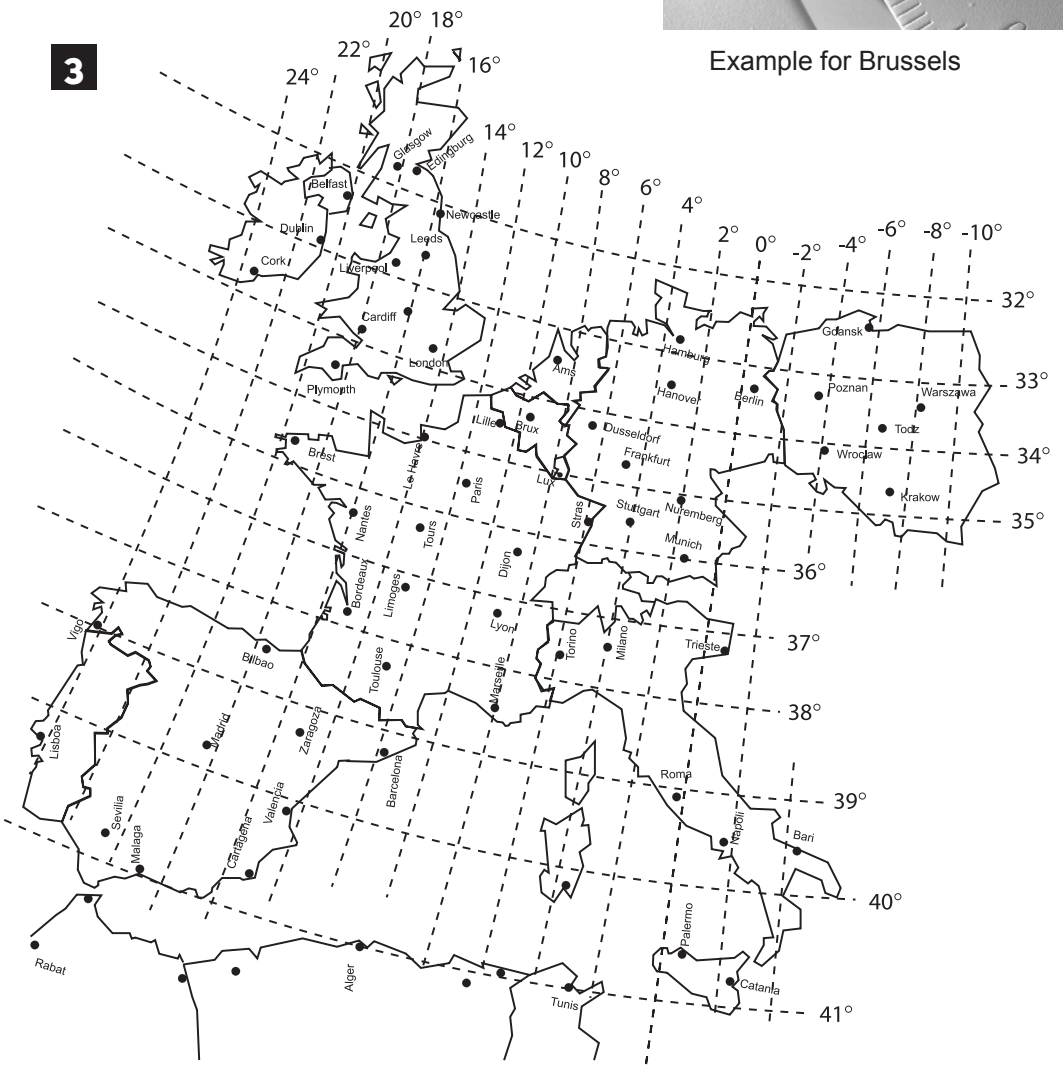


## Angle adjustment

Look at the Europe map (diagram 3) and find your elevation angle in relation to the horizontal line. For example, about 31,5° for Glasgow, 38° for Bordeaux and 39,5° for Napoli, 34,5° for Brussels.
When the right angle as been adjusted, tighten the screws.
Be sure to read the angle on the side labelled «ELEVATION», not on the side labelled «LATITUDE»




Example for Brussels




Inclination and angular reading for Hotbird 3

## D - Connection

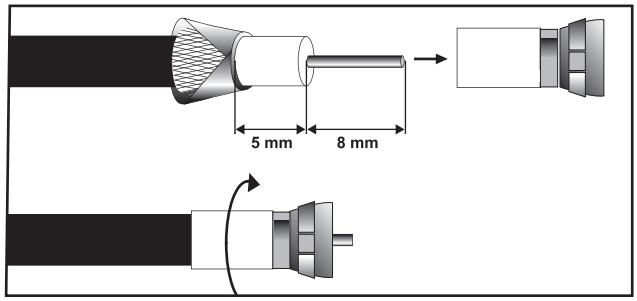
For the installation you will need 2 pieces of cable. The first one, roughly 1,5m (5ft) to go from the LNB to the motor, the second one as long as it takes to go from the motor to the receiver.

Prepare the cables and assemble the “F” plug at the end of the cable.

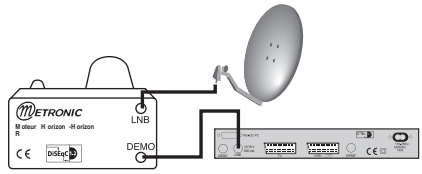
Respect the dimension indicated on the diagram 4; the plug must screw on the aluminium foil rolled up on the outer sheath. Make sure that none of the braid strand is in contact with the central core of the cable.

Connect the receiver to the television set with a scart lead. Put the motor near the receiver, on a table or on the floor, and connect the receiver LNB input to the Motor RECEIVER output with the 1,5m (5ft) cable, then switch on the receiver.

4




5




receiver

## E - Reset the motor and checking of the stop

The reset of the motor is to reset its position, and put it at 0°, which means face south.

Go into the DiSEqC 1.2(2) menu and then reset the motor (3).

- The motor will reset while looking for his reference position. If the motor does not turn, connect the motor to the LNB with the long cable then reset the motor.

(2)(3) Go to corresponding paragraph page 13

## F - Prepare the motor

You will now store the position of Hot Bird then put back the motor precisely at 0° to assemble the satellite dish.

1) Put the receiver on the Hotbird reference channel (1).

2) Give a number to the Hotbird satellite (6) (in any doubt put 4), and then wait that the motor stops turning.

3) Look on the map of Europe (3) and find your Hotbird angular reading in relation to the vertical lines. For example, 18° E in Glasgow, 15° E in Bordeaux, and 2°W in Napoli.

4) Go into the DiSEqC 1.2(2) menu then, with a continuing rotation(4), bring the motor roughly on the Hotbird azimuth with a step by step rotation (5).

Example: London = 14°
With the remote control you must make the motor turn until the metallic notch used to read the azimuth reaches 14°. See example on the picture 6.

When the arrow is on the right hand side of the 0, the motor turns the dish to the East.

**6**

Exemple for London

5) Store the Hotbird position (7)

6) Reset (3) the motor to bring it back to the 0° position.

7) Switch off the receiver, take off the cables and then fix the motor on the wall mount or mast. Tighten the screws (4) with such a torque that it doesn't fall down, but to still allow to turn around the mast.

8) Direct roughly the motor towards the south. In case of an assembling on a wall, make sure the wall faces south (+/- 20%).

9) Link the receiver and the motor with the long wire prepared at the step D.

(1)(2)(3)(4)(5)(6)(7) Go to corresponding paragraph page 13

## G - Satellite dish assembling

Assemble the different parts of the satellite dish (see the user manual included with it).

## H - Assemble the satellite dish on the motor

- Assemble the satellite dish and fix it on the motor's stem. The satellite dish U-Bolt must be as low as possible on the stem. As the motor is at 0°, make sure you perfectly align the dish offset arm with the motor (diagram H1). In order to prevent the dish from falling down in case of breakdown of the U-screw of the dish, we advise you to put the security-bolt (marked 4 on the figure page 15). If this bolt is to short to maintain the U-screw, link it to the dish with the help of a strong wire.

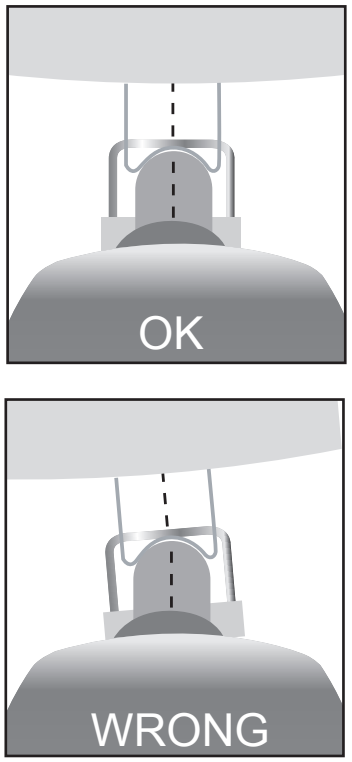
- Direct approximately the whole set(satellite dish + rotor) towards the south. Adjust the angle on the back support of the dish, so that the dish is vertical.

- Switch on the receiver.

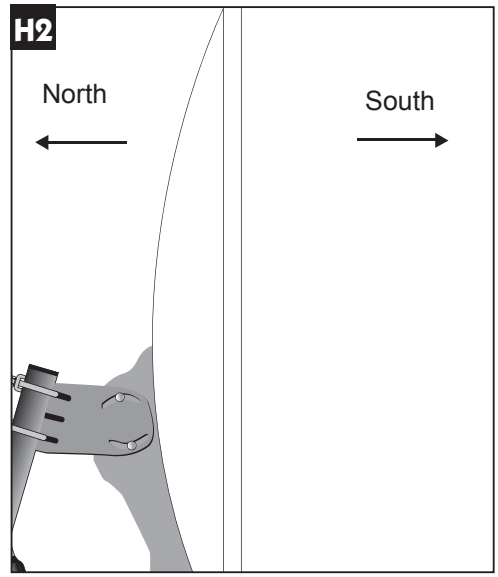
- Do a continuing rotation (4) until the stop 75° East and 75° West to check if there is no obstacle. If you get close from an obstacle during the rotation, go to paragraph N page 24 to adjust your electronic limits.

- Put the receiver on the Hotbird reference channel.

H1




H2



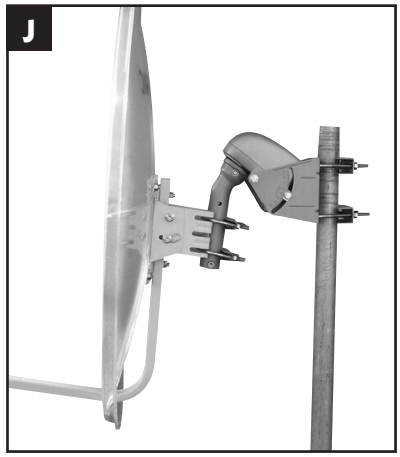

(4) Go to corresponding paragraph page 13

## I - Assembling the LNB head

Check the LNB and receiver user manual.

## J - Checking

Before going to the final stage (the alignment) check that your installation looks like the picture below (exept the cables).




## K - Alignment / Satellite dish orientation

- At the end of the step K, you will receive the Hotbird reference channel on the television screen. Do not go to step L (adjusting the alignment) if you do not receive this channel.

1) Put the receiver on the Hotbird reference channel then display the signal indicator (8).

2) While checking the level, sweep slowly (for 20 seconds) a quarter of a turn on the right, then a quarter of a turn on the left while pivoting the whole (satellite dish + rotor) around the mast. If the level is not going up, increase the satellite dish incline of 2° and do the same manual scan. Carry on as above by steps of 2° followed by a sweep until the level increase. When you are on the right satellite, the image will appear in the background. Adjust it to obtain the maximum level and quality (bar as long as possible). In some area, it is normal that you will turn up to 20 sweeps, be patient.

3) Block temporally all the nuts.

(8) Go to corresponding paragraph page 13

## L - Orientation adjustment

- Put the receiver on the Atlantic Bird 3 reference (1) channel. This satellite doesn't broadcast popular or interesting channels. However, its position in the sky makes it an interesting one for dish and motor alignment.

- Check in diagram the Atlantic Bird 3 angular reading of your geographical area.

- Give (6) a satellite number to Atlantic Bird 3 (put 01 in case of hesitation).

- If the motor does not stop at the right value, bring it with a continuing research (4) or step by step (5).

- Store (7) this position for Atlantic Bird 3. Exemple : Edingburg = 2°W

Leave all the menus and check that you correctly receive the Atlantic Bird 3 reference channel (3). If it is not the case, you have 2 cases:

First case: You do not receive anything at all, even when you slightly move the satellite dish alignment. In that case, it means that a big error has been made during the installation (mast not vertical, error between east and West, bad reading of the angle…). Restart the installation from scratch while checking each detail very carefully.

(1)(3)(4)(5)(6)(7) Go to corresponding paragraph page 13

Second case: You have a bad reception and you have to adjust slightly the satellite dish position angle (1 or 2 degrees) to receive correctly Atlantic Bird 3. In that case, the design curve of the motor is out of line with the real curve. We then advise you to go back to the step K while putting 2° more for the Hotbird position in your area. If the result is not good, try 2° less.

Angular reading for Atlantic Bird 3

## M - Validation of the satellites

For each satellite, you have now to storethe right position in the motor. The operation is done for Hotbird and Atlantic Bird 3, you have to do it for Astra, etc.

Example for Astra 19° E

• Go onto the Astra reference channel.

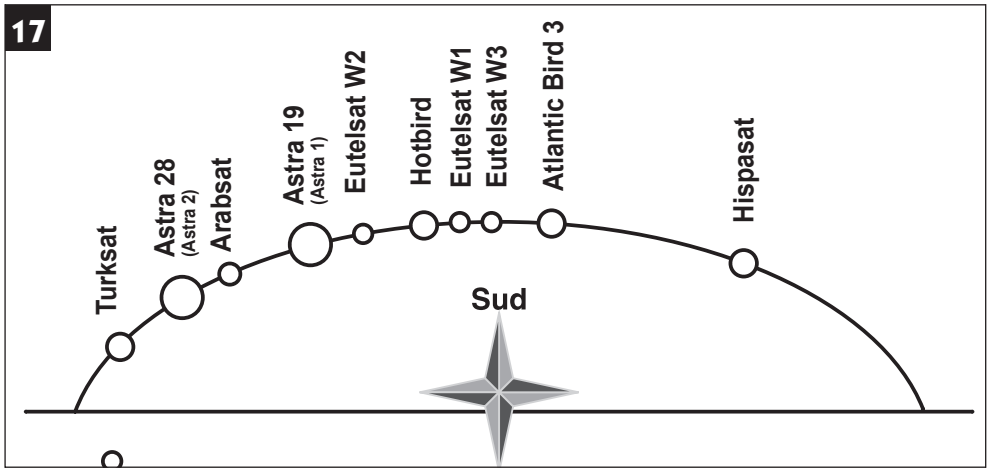
• Go into the DiSEqC 1.2 (2) menu and give a number (6) to Astra 19°E (03 if you hesitate).

• By a continuous rotation (4) and then a step by step rotation (5), make the motor turn to obtain the maximum level and quality.

• Store (7) the position founded.

• Check that you receive the Astra channel. If not, it means that you stored the position of another satellite, which broadcasts some channels at the same frequency. Try the operation above again and make sure that your satellite dish is pointed slightly on the left from Hotbird like shown on the Diagram 17. Do the same operations for the other satellites. When you receive all the satellites, screw definitively all the nuts. Your installation is finished.

Note: The Hispasat or Turksat reception with a motorised installation is very difficult and needs a perfect alignment. For the reception of this satellite, we advise a fixed installation, with a particular look at the adjusting of the counter-polarization.




## N - Electronic limits

Your motor has got mechanical limits that preclude from moving too far east or west (maximum +/- 75 degrees roughly). These mechanical limits are not adjustable. If ever you put the motor in a location where there is a risk for the dish to hit an obstacle, then you must set electronic limit. See the user manual of your satellite receiver for such settings.

(2)(4)(5)(6)(7) Go to corresponding paragraph page 13

## Electronic stops adjustment (with DiSEqC 1.2 motor)

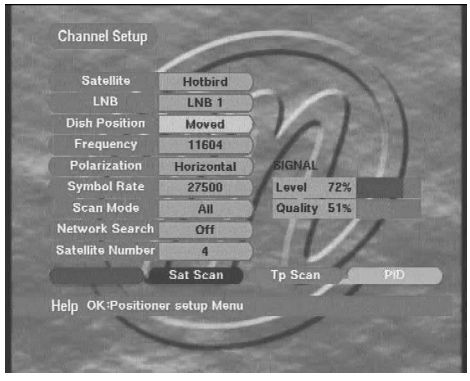
This paragraph explain you how to reset your motor electronic stops in case you need to do it.

- Go into MENU / **Installation / Channel Setup / Dish Position** press OK.
- On the line **Limit set**, choose **disable** with the arrows ◂ ▸ and press on OK.
- Enter you PIN code (0000 at output of factory)
- Check that the line **Auto stop** indicates **off.**
- Go onto the line **continuously moving** and press on ▸ to bring the motor at the maximum to the west.
- On the line **limit set**, choose **West limit** and validate by OK.
- Go onto the line **continuously moving** and press on ◂ to bring the motor at the maximum to the east.
- On the line **Limit set**, choose **East Limit** and validate by OK.

## 5 - Connection on a fixed satellite dish already aligned on a satellite

The receiver being disconnected from power supply, connect directly the LNB to the LNB receiver input. Connect a scart lead from the television to the receiver TV output scart socket. For the moment, do not connect any other standard appliance on the receiver DEMO output. Switch on the television; connect the receiver on the power supply. Press on the ⏻ key, the green LED in the front switch on. Check in the list of the pre programmed channels at the end of the user manual. You can select and visualize the channels of this satellite towards which you are pointing.

Notes : if your satellite dish is currently pointed towards Atlantic Bird 3 (ex Telecom 2C = French national analogue channel in Free To Air), you will not have access to any digital channels. We then advise you to install another satellite dish to keep receiving the French national channels in analogue and watch others channels in digital.



## 6 - Connexion on a bi-head system Astra 19,2° + Hotbird already aligned

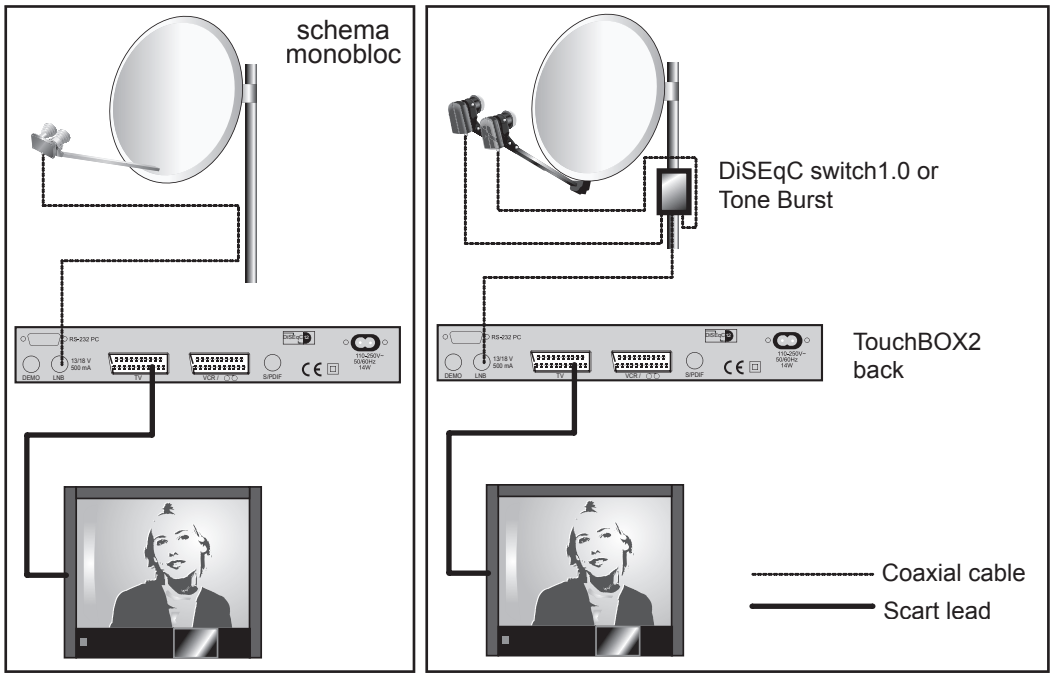
Remarks : this paragraph goes as well for Monoblocs.

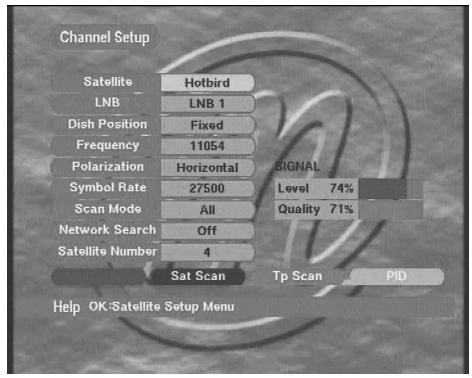
Connect the cables and the leads as indicated on the figure below. It is useful to know on which inputs of the switch the heads Astra and Hotbird are connected. If you do not know it and that the installation is difficult to reach, test the 2 possible combinations:

Astra on A (or 1) and HotBird on B (or 2) or the opposite.

To program your receiver, follow the instructions from paragraph 3B page 12.

Caution: you should not touch the satellite dish adjustments nor to the switch, it is only necessary to program your digital receiver.



## 7 - Connection on a motorised DiSEqC 1.2 already aligned

Connect the cables and the leads as indicated on the figures below.

⚠ When 2 satellite receivers (a digital and an analogue receiver for example) control the same motor, it is important that each one of them give the same number to a given satellite. For an easiest installation of your new digital receiver, locate the classification of the satellites used by your analogue receiver.

If your motor and your receiver have never been used before, use the number that you wish for each satellite.

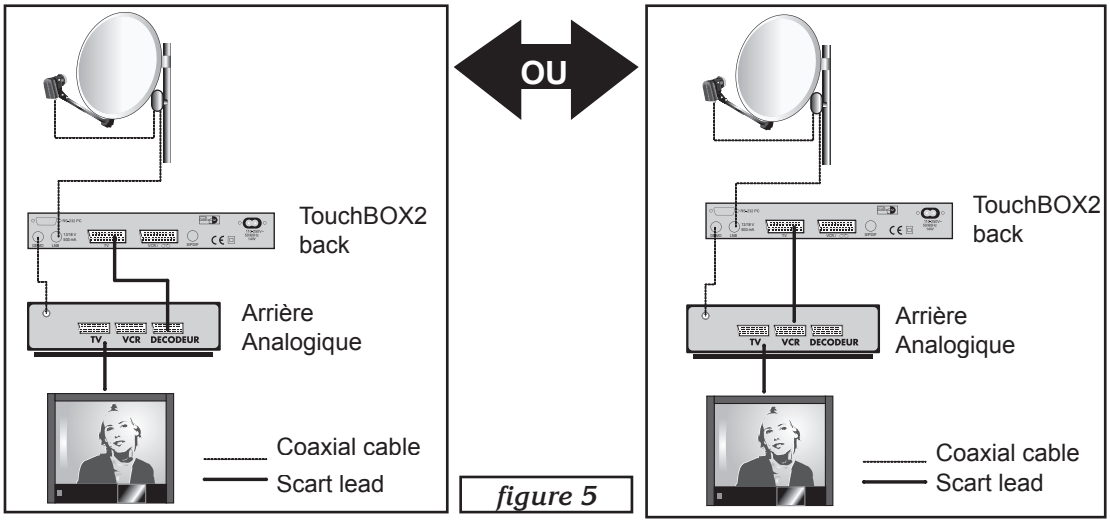



*figure 5*

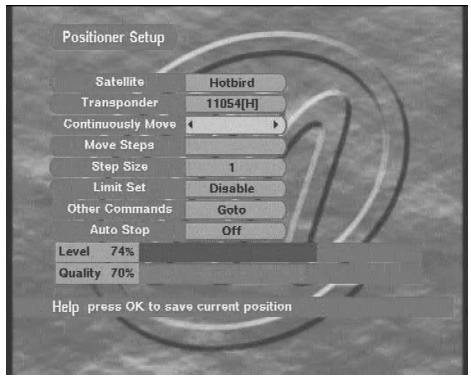
If you do not have an analogue demodulator, connect directly the receiver to the television.

For each satellite you want to receive in digital, it is necessary to proceed as follows:
**Example on HotBird**

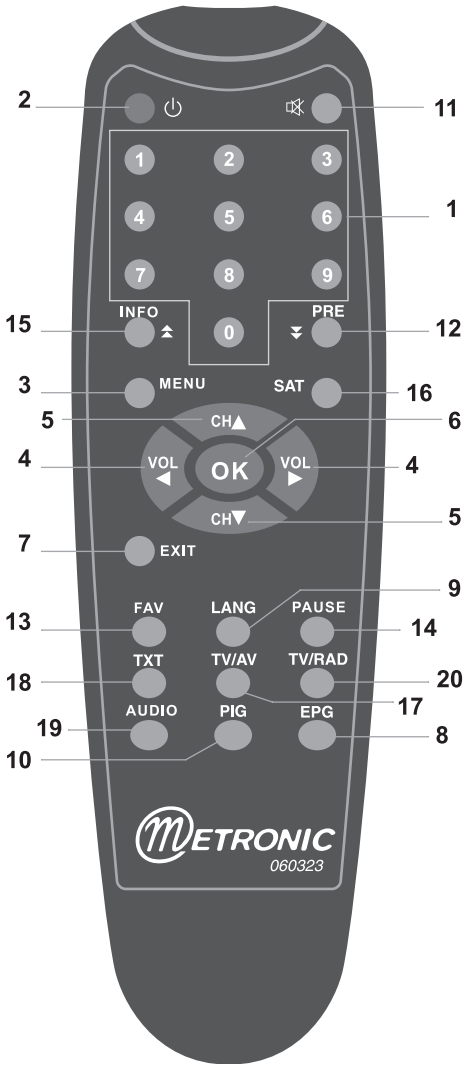
- Go in MENU / **Installation** / **Antenna type.**
- On the line **LNB dish**, choose **Moved** with the key ◂ ▸

For each satellite, you will go onto the reference channel (see table 1 page 9) then give a number to this satellite. For that:

- Go into MENU / **Installation** / **Channel Setup**
- On the line **Satellite Number**, choose the number with the arrows ◂ ▸. If the number that you are giving is already taken, an alert message is appearing 3 seconds at the bottom of the screen.
- Press on OK to give a number to a satellite and then wait until the motor stops moving.
- If your motor was correctly aligned, and that you have entered the right number for HotBird, the signal indicator must be green. If it is not the case, check the alignment and your satellite numeration with your analogue receiver, if you have one.
- Press on EXIT to leave all the menus and check that you effectively receive the channel from the satellite in question.
- Do the same thing for the other satellites.



## 8 - Remote control description




**1** Digital keys. In normal use, it allows to type the channel number desired. In the programming mode, that allows to enter the digital values.

**2** Touch ON / OFF. Allows switching on or switching off and putting the terminal in standby.

**3** MENU Key. Allow you to enter in the main menu or to leave the main menus.

**4** ◂ VOL ▸ key makes it possible to regulate the volume on a normal use. In the menu, allow you to modify various parameters.Gives you the ability, as well, to display the following page ( ▸ ) or the preceding page ( ◂ ) in the long list.

**5** ▾ CH ▴ keys. In normal use, a press on one of the keys change channel. In the menus, allow you to pass from one line to another.

**6** OK key. Allow you to display the channels. Validation in the menus.

**7** EXIT key. Allow you to go back to the preceding menu.

**8** EPG key (Electronic Program Guide). Show the program in progress and the following ones, when the channels transmit this information. Press on OK to select the channel or the emission you would like to watch.

**9** Lang Key. When several audio ways are transmitted (Euronews on Hot Bird for example) it makes it possible to choose the language of the broadcast.

**10** Unused key on the TouchBox 2 model.

**11** MUTE Key. A first press makes it possible to switch off the sound. A second press returns in normal mode.

**12** PRE Key. To go to the preceding channel, the one you were just watching. Allow you, as well, to switch from one page to another in the long list.

**13** FAV Key. To access your favourite channels.

**14** PAUSE Key. Allow you to do pause on an image. Another press allow you to go back to the emission.

**15** INFO Key, display technical information on the channel in progress. Allow you, as well, to switch from one page to another in the long list.

**16** SAT Key, to display the channel list from one satellite.

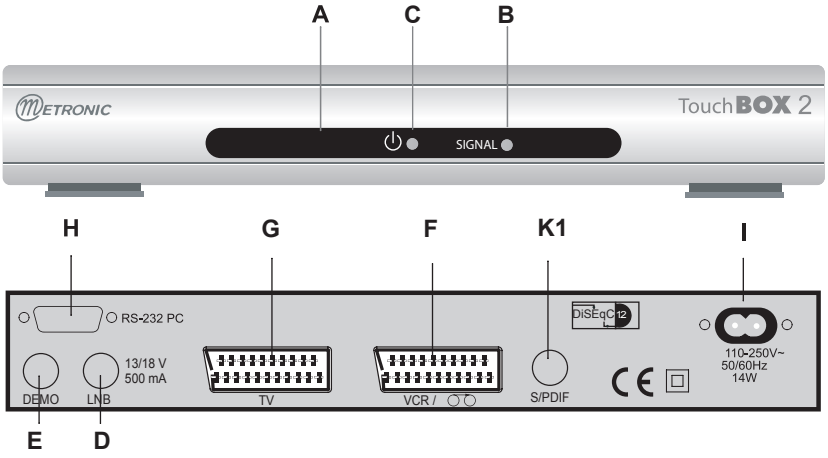
**17** TV/AV Key, to release the television commutation. You can then watch the normal channel on your television, while recording another one on satellite.

**18** TXT to deactivate the teletext.

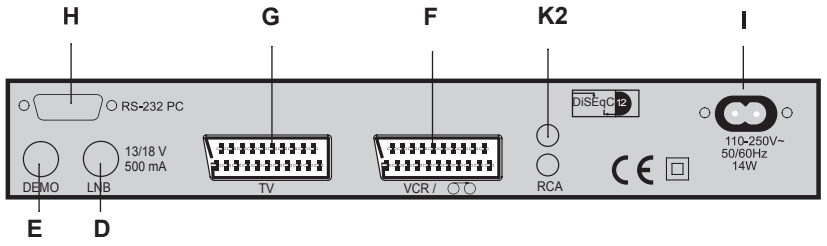
**19** AUDIO Key to switch from the normal mode (stereo) to the mode mono-right or mono-left.

**20** TV/RADIO Key to switch from TV mode to RADIO and opposite.

## 9 - Receiver description




SP DIF version




SP RCA version

**A** Infrared cell (detects the remote control infra-red signal).

**B** Signal Indicator. Switch on if the reception is good.

**C** ON / OFF Key. Green when the receiver is on, switch off otherwise.

**D** LNB entry to connect the input lead of the satellite.

**E** LNB output, DEMO, to connect a demodulator or a digital receiver.
Radio mode Indicator (switch off if you watch the television).

**F** Input / output VCR scart. When you play a cassette, the VCR take over automatically on the receiver. You can use this scart socket to connect an analogical demodulator.

**G** TV scart socket. To connect the receiver to the television TV/Radio Key.

**H** RS232 connector for SAV only.

**I** Power Supply.

**K1** Digital audio output, Is active only for the channels, which emit in digital sound (very rare).

**K2** Analogue audio output for direct connection to your HI-FI system.

## 10 - Day to day use

In normal use, you will use only the following keys whose function is described in the following paragraph:

- ◂ ▸ Keys to regulate the volume of sound.
- ▾ ▴ Keys to change channels
- 🔇 Key to switch off and switch on the sound.
- Digital Keys to go directly to a channel
- EPG Key to reach the programs guide.
- OK Key to access a TV channel or a radio.

## 11 - Access a channel

At output of factory (and after a reset), the ▴ ▾ keys allow me to change some channels among the list of the pre-programmed channels. You can also access directly a channel while entering its number.
By pressing on OK you will make the TV channel list to appear.

# 12 - Add a channel

You can either add a particular channel, of which you know the technical features (manual search), or add a new unknown channel (automatic search).

## A - Manual search

A channel is emitted by what is called a transponder (TP). It is a satellite relay of which you should known the 4 following parameters:

- Its frequency (e.g. 12551 MHz).
- Its debit of symbol SR (e.g. 22000)
- Its polarity (e.g. Vertical)
- The satellite which emits it (e.g. Astra 19.2).

You will find these parameters in specialized magazines, which propose a monthly update, or on www.satcodx.com, www.lyngsat.com , etc.)

- Go into MENU / **Installation** / **Channel setup**
- On the **Satellite** line, press on OK to display the satellite list.
- With the ▲ CH ▼ keys, select the satellite, which emits the channel to be added, then press on OK.
- Go onto the line **Frequency** and type OK to display the list of transponders.
- With the ▲ ▼ keys, select the transponder (TP) which emit the channel to add and type OK. If the TP does not appear in the list, add it as described in the paragraph 12C page 32.
- Check that the quality indicator is green. If it is not the case, that means the TP parameters are incorrect, that the LNB properties are false or that the satellite dish is not aligned on the right satellite.
- On the line **SCAN MODE**, display **FTA only** with the key ◄ ►.

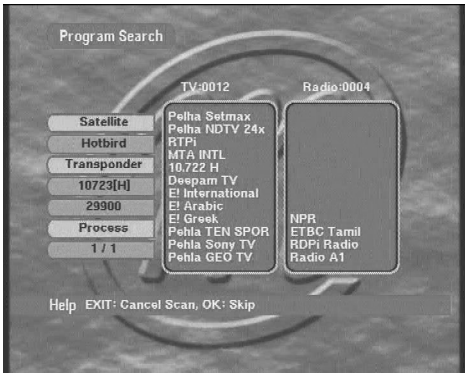
  Note: your receiver can only receive the channel in clear (FTA), but some channels in clear are sometimes declared as encrypted by the broadcaster. To add these channels, select **all**.
- On the line **Network search**, display **off** thanks to the keys ◄ ►. If you select **On**, the search will wider to all the frequencies transmitted by the broadcaster.
- Press onto the green key (**TP Scan**) to launch the search. A confirmation window will appears: type EXIT.

  Note: the EXIT key adds at the end of the list the new channels from the transponder. The channels already in memory will not be affected. If you type OK, the channels already in memory will be deleted, then all the channels from the selected transponder will be put at the end of the list.

- The window **Program Search** opens, the list of channel found appears then the receiver goes back into the Menu **Channel Setup**. Press 3 times on EXIT to leave all the menus.

## B - Automatic channel search

- Go into MENU / **Installation** / **Channel Setup**
- Go onto **Satellite**, press on OK to display the satellites list.
- With the ▲CH▼ keys, selecte the satellite, which emits the channel to be added, then press on OK.
- Press on the blue key (**Sat scan**).
- Press on EXIT to launch the search while adding all the new channels at the end of the channel list.
- The window **search program** appears and display all the channels found.




Note: The automatic search (**Sat scan**) sweeps the transponders list associated to the satellite. If a channel is not found, and you are sure that it exists, it may be because you need to update the transponders list. (see following paragraph)

## C - Add / Delete / Edit a transponder

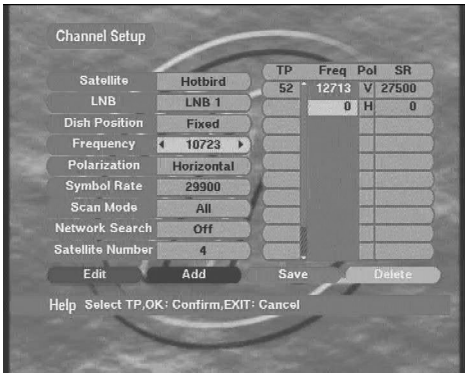
- Go into MENU / **Installation** / **Channel Setup**
- Press OK on the **Satellite** line to display the satellites list.
- Choose the satellite with the ◄ ► keys and validate by OK.
- Go onto the line **Frequency** and type OK to display the transponders' list.

<u>To delete a transponder</u>

- Go onto the transponder to delete with the keys ▲▼ then press on the yellow key. Confirm by OK. Note: deleting the obsolete transponder accelerate the channel automatic search.

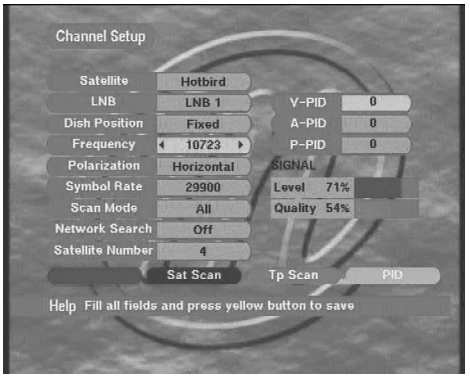
<u>To add a transponder</u>

- Press on the blue key (add).
- Enter the 5 figures of the frequency ►
- Selectthe polarity (H/V) with the ▼ key then press on ►
- Press the 5 debit figures (SR) and the (save).
- Press on OK to leave the transporters' list.



## D - Particular channel search (PID)

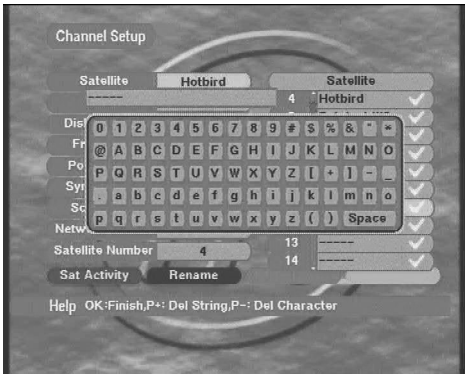
In some cases (rare) a manual or automatic search could not find a channel that effectively exists. You should then add it with its “PID” which you will find in the specialized magazines or specialised website.




- Go into in MENU / **Installation / Channel setup**
- Onto **Satellite**, press on OK to display the satellites list.
- With the ▲ CH ▼ keys, select the satellite, which emits the channel, to be added then press on OK.
- Go onto FREQUENCY, type OK to display the transponders list.
- Go onto the TP where the channel to add is and validate by OK. If the TP is not in the list, add it (see preceding paragraph).
- Press onto the yellow key to display the data entry window PID.
- Enter the Video PID onto the line V-PID, the PID audio onto the line A-PID and the PID PCR onto the line P-PID. Note, the PID PCR is very often equal to the video PID.
- The new channel is now added at the end of the list under the name “TV CH”. You then have to rename it by following the explications from the paragraph 13E page 35.

## E - Add a satellite

If the channel is emitted by a satellite which is not factory pre-programmed, you have to create the satellite before researching the channel. For that:




- Go into MENU / **Installation / Channel Setup**
- Type OK on the line **satellite** to display the satellite list.
- Scroll down with the key ▼ on the line which follows the last satellite.
- Press onto the blue key to give a name to the satellite (see paragraph 13E page 35).
- If you are in a motorised reception, give a free number on the line **Satellite number**. If you are in commuted reception, choose the right LNB on the **LNB** line. (see § 3 B page 12).
- Scroll down onto the line **Frequency** and type OK to display the transponder’s list.
- Add the necessary TP as indicated in the paragraph 12C page 32.

# 13 - Modify / Organise channels / Running the favorites

Whatever if it is the TV list or the radios list, you can move a channel, remove it, rename it, mask it or block it. A masked channel is not accessible with the 5CH6 keys. A blocked channel requires a PIN code to be watched. You can also sort the channel list according to some criteria. To personalize the television channel list, go into MENU / **Channel organizer.**

Before modifying a channel, you could pre-watch it by selecting it with ▲ CH▼ keys then by typing on OK.
At any time, you can:

## A - Delete one or several channels

- Press on the yellow key
- Select the channel to delete with keys ▲ ▼.
- Press onto the red key, a ticked box appears on the line
- You can select some other channels and tick it with the red key.
- When your selection is finished, press several times on EXIT to leave all the menus.

## B - Delete all the channels

- Press onto the yellow key then onto the blue key
- Confirm by OK then enter the PIN code (0000 at output of factory)
- Press several times on EXIT to leave all the menus.

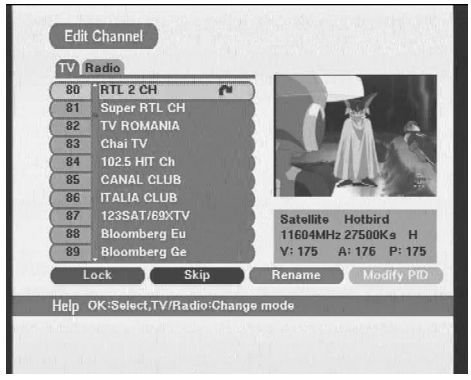
## C - Move the channels

- Go onto the channels to move with the keys ▲ ▼
- Press onto the red key then the yellow key
- Type the location number you want for this channel
- You can move some other channels the same way before leaving.
- When your reorganisation is finished, press on EXIT, on OK, then enter the PIN code.

## D - Hide channels

A hidden channel is a channel which does not appears in the channel list. You could if you want to get it back in the future.

- Go onto the channels to hide with the keys ▲ ▼.
- Press onto the green key then onto the blue key.
- You can hide some other channels the same way before leaving.
- When your selection is finished, press on EXIT. The hidden channels will now appear with a blue arrow in the edition channel list. To undo the hiding, use the same way as you do to hide.



## E - Rename a channel

- Go onto the channels to rename with the keys ▲ ▼.
- Press onto the green key the keyboard appears. The initial name appears in the top window, surrounded by green.
- Place the cursor under the letter you want to modify.

> Note: the INFO key delete the letter above the cursor, the Key PRE erase totally the name.

- Press on ▼ to activate the keyboard and select the letters by OK.
- When your selection is over scroll up into the windows name with the key ▲ (green window) and validate by OK.

**Some channels, even emitted in clear (without subscription) are reserved for an adult public. To preserve your children, we advise you to install a parental Pin code and block these channels (see paragraph 14E).**

## F - Lock a channel

A locked channel asked the PIN code to be watched.

- Go onto the channel to lock with the keys ▲ ▼.
- Press onto the green key then onto the red key.
- Type the PIN code (0000 at output of factory), a lock appears.
- You can lock other channels, the same way, before leaving.
- When you selection is finished, press on EXIT.

## G - Sort channels

Press onto the red key then

- Onto the red key for an alphabetical sort
- Onto the blue key for a sort by type (clear / encrypted)
- Onto the green key for a sort by satellite

Press on EXIT, on OK then enter the PIN code (0000 at output of factory).

## H - Favorites channels

You can manage 4 favorites channel lists.

- Press onto the blue key to enter in the favourite channel selection mode.
- Go onto the channel to be selected with the arrows, and then press on the colour key corresponding to the list you want.
- A heart with the colour in question appears following the channel name.

> Note: A channel could be put in several favourite lists at the same time. A heart appears for each list.

- When your selection is finished, press on EXIT.

To access the favourite channel list, simply press on the FAV key. Several following press will scroll the 4 lists.

# 14 - Miscellaneous adjustment

## A - Choice of language

To choose the language of the menus, press on the remote control key MENU, select the 4th line and press on OK. Select again the 4th line and press OK. Select the 1st line and press on OK then select the language you want with keys ◂ ▸.
Press 4 times on EXIT to leave all the menus.
Some channels broadcast in several languages or emit some sub-titles in several languages (very rare). You could choose the language by default in the Menu / **Installation / System setup / Language settings**.

## B - TV scart adjustment

In MENU / **Installation / System setup / TV settings**, you could adjust the picture which going to the television

- On the line TV Mode, leave **Auto**. You could however force the SECAM mode if your television is not compatible with PAL.
- On the line Screen mode, choose 4:3 LetterBox if you have a normal television, **16:9** if you have a 16:9 television.
- On the line CVBS/ RGB, the mode by default is CVBS (standard mode which always work). But you can use the **RGB** mode, which gives a better picture if your television is compatible.

The lines UHF Mode and **UHF channel** are not used in the TouchBox2.

## C - Time setting

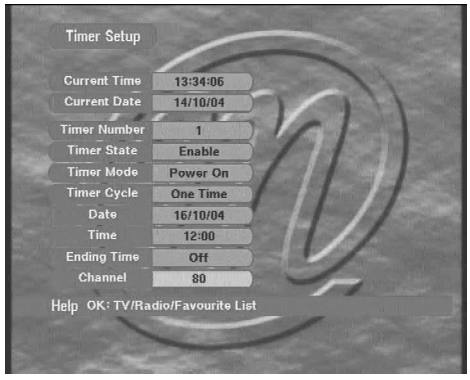
The time setting is necessary if you want to use the timer (programmed switching on to record pre-recorded program).
Into MENU / **Installation / System setup / Time settings**, you can set up the time manually or automatically. For an automatic adjustment, choose **On** on the line **GMT usage**. You then have to adjust the time difference, which is in the UK and in the Republic of Ireland GMT+0. Some channel emits a false time. He might be useful to adjust manually the system. On the line **GMT usage**, choose **Off** then adjust manually the time on the line **Set local** time and the date on the line **Set date**.

> Note: it is common that the time displayed by the channel is wrong. It is the "normal" that when you change channel the system time change. Metronic cannot guarantee the exact time displayed on its receiver.

## D - Programming of recording

You can program an automatic switch on and switch off of the receiver, for example, to record a later time program.
In the main menu, the menu **Timer menu** allows you to program up to 8 later time recordings.

- On the line **Timer state**, choose **Enable**.
- On the line **Timer Mode**, choose **Power On**.
- On the line **Timer cycle**, choose **One Time** for one off recording. You could repeat it, as well, everyday (**Every Day**) or every week (**Every Week**).
- On the line **Date**, adjust the event time,
- On the line **Time**, adjust the time of start
- On the line **Ending Time**, adjust the time of the end of the program,
- On the line **Channel**, press on OK to display the channel list. Choose then the channel to record with the arrow then validate by OK.
- Press on **Menu** to record the adjustment and come back to the main menu.




Note: Take a sufficient margin concerning the starting time. The time of the system is not effectively, very accurate, and varies very often when you change channels.

Advice: Switch off your television with button ON/OFF to avoid it to switch on when the timer will start.

### E - Parental control

To block some channels, go to the paragraph 13 F page 35

To make your protection efficient, you need to change the PIN code at lock access to menus:

- Go into MENU / **Installation / Parental lock**, adjust **lock** on the line **Installation**
- On the line **Old PIN** type the **4** figures of the actual code (0000 at output of factory)
- On the line **New PIN**, type the **4** figures of your new code.
- Enter again these **4** new figures on the line **Verify PIN**.
- Your new code is automatically saved, keep it preciously.

## 15 - Reset the receiver

This operation put back in memory the factory parameters, as well as the channel list.

⚠ Be careful, all the modifications you carried out will be lost (new channels, favourite channels…)

To reset the receiver, do the followings:

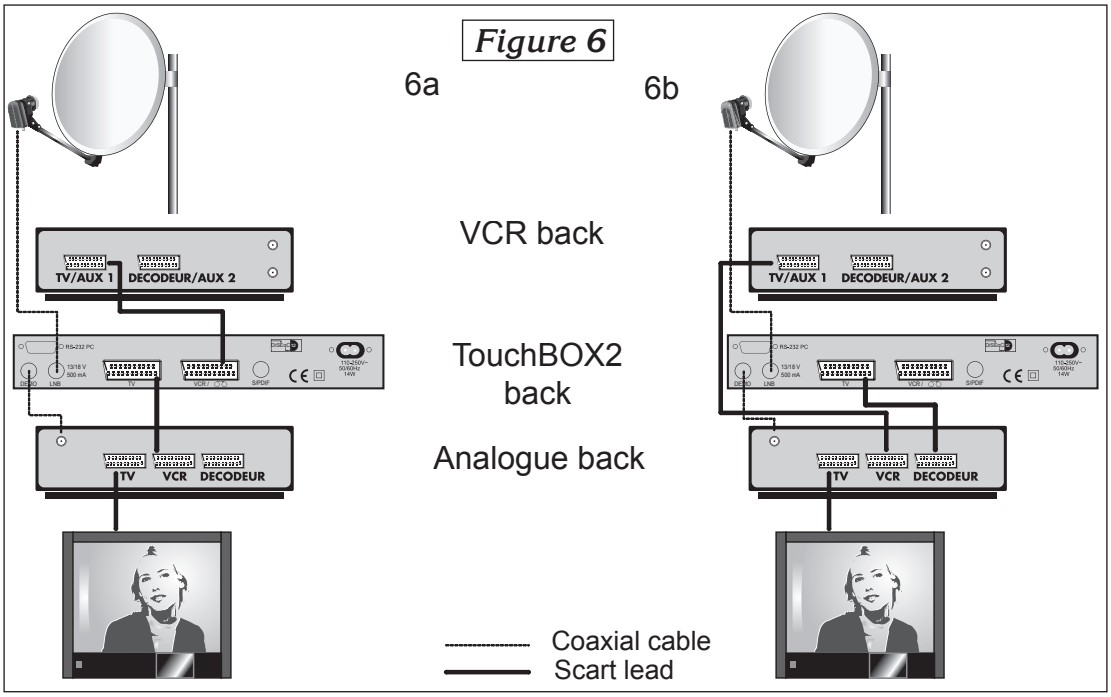
- Go into MENU / **Installation / System setup / Factory reset**
- Type the PIN code (0000 at output of factory) and patient.

## 16 - Connection with an analogue receiver and video cassette recorder

The figure 6 page 39 proposes two connexions among all the possible configurations. The figure 6a is an assembly in cascade. It leaves space for a possible decoder for Pay per View channels, but does not allow you to record the analogue channels.

The figure 6b show a star assembly. It allows you to record analogue, but does not work with all the analogue receiver. It is a solution (which requires a scart to scart adaptor), which consists in connecting the video cassette recorder and the digital receiver on the analogue receiver VCR scart input.

To record the digital channels, it is necessary that the receiver is switch on the channel to record. Then launch the recording on the video cassette recorder channel A/V. To read a cassette, simply launch the reading, the video cassette recorder will automatically take the hand on the receiver. If it is not the case, press on remote control TV/VCR key of your video cassette recorder.




## 17 - Use with a VCR

Connect simply your video cassette recorder on the receiver VCR scart input. To record the digital, it is necessary that the receiver is switch on the channel to record. Then launch the recording on the video cassette recorder AV channels (0, AV, EXT....) see the video cassette recorder user manual for exact handling.
To read a cassette, launch simply the reading, the video cassette recorder will automatically take the hand on the receiver. If it is not the case, press on the remote control TV/VCR key of your video cassette recorder.

## 18 - In case of problem

- **The screen displays «No signal or Bad signal»**

Three possibilities:

1. The program (channel) that you wish to watch has disappeared from the transponder. Get a specialized magazine to know if the parameters of these channels have changed or if she has disappeared.
2. You are on another satellite, which emits channels on the same frequency as the one you would like to watch.
3. The motor work and the satellite dish spin, wait until it’s finished.

- **On one or more channels, the screen remains black.**

The channel you want to watch is probably scrambled. For your information, an operator can emit a channel scrambled with information making believe to the receiver that is a free to air channel. The opposite is possible. `

Be careful: A channel could be free to air sometimes during the day.

- **The terminal asks me a PIN code to watch a channel**

Enter 0000 if you did not input a PIN code. If you input a PIN code, but you forgotten it, reset the receiver, contact the hotline.

- **My motor spin but does not go beyond a certain angle.**

See paragraph 19 (below).

Send to : IT4E – 30, Heathfield Court – London W4 4LR

# QUESTIONNAIRE QUALITY

| | |
|---|---|
| Name:<br>Address:<br><br>Postal Code:<br>City:<br>Tel. | Date of purchase :<br>Place of purchase :<br><br>Name of the shop : |

• **Do you already have an installation satellite?** ☐ yes ☐ no
If yes, which made? _____

• **Product bought:**
- ☐ Fixed Digital kit
- ☐ Motorised digital kit
- ☐ Digital receiver alone

• **Reason of purchase :**
- ☐ Access to digital quality
- ☐ More channel choice
- ☐ Foreign channels

• **How did you know METRONIC ?**
- ☐ Friends / parents
- ☐ Advertising / catalogues
- ☐ In store
- ☐ I have already a METRONIC receiver

• **Did you already use the METRONIC help line ?** ☐ yes ☐ no
If yes, what do you think about it ?

_____

_____

_____

## In the event of a complete kit purchase:

• **Did you install it yourself ?** ☐ yes ☐ no

• **Did you go through a fitter ?** ☐ yes ☐ no
If yes, for which amount ? _____

• **Which difficulties did you encounter at the time of the installation ?**

| | | |
|---|---|---|
| **1** Assembly of the plug on the cable | ☐ Easy | ☐ Difficult |
| **2** Satellite dish assembly | ☐ Easy | ☐ Difficult |
| **3** Heads (LNBs) assembly | ☐ Easy | ☐ Difficult |
| **4** Motor assembly<br>(in the event of motorized kit) | ☐ Easy | ☐ Difficult |
| **6** Alignment | ☐ Easy | ☐ Difficult |

**• Did you isolate the LNBs (heads) ?** yes ☐ no ☐

☐ METRONIC isolated paste
☐ Other products METRONIC
☐ Silicone adhesive tape
☐ Ruban adhésif
☐ Other.....

**• Do you think the user manual is user friendly when you have to install, without an installer, a satellite kit?** ☐ yes ☐ no

Which modifications would you wish to see?

**• Where did you install your satellite kit ?**

☐ On a balcony
☐ On the roof (chimney...)
☐ On the wall
☐ On the ground
☐ Other.....

**• Which cable lenght did you use ?**

☐ 05 m
☐ 10 m
☐ 15 m
☐ 20 m
☐ 30 m
☐ 40 m
☐ more

**Other remarks or suggestions :**

**• Or you satisfied of your purchase ?** yes ☐ no ☐

# ASSISTANCE AND ADVICE

You will find in the following pages, the channels characteristics that we programmed in the receiver. This programming was established according to information's, which are at our disposal to date, and according to programs' which are emitted to date.
The operators responsible for the television broadcasts by satellites sometimes change without notice the frequencies and the transponders; we cannot unfortunately guarantee the accuracy of these programming in time, please accept our apologies on this matter. You will be able to ameliorate these factory adjustments if you follow the instructions given on §12 page 31.

In spite the care that we brought to the design of our products and the drafting of this user manual, you may have encountered problems.
Please do not hesitate to contact us, our specialists are at your disposal to advise you free of charge except the call cost :

You can contact us by e-mail : **hotline@metronic.com**

**IMPORTANT** : in the object of your message, make sure the word METRONIC appears.

Phone number : 0033 (0)892 350 315
Monday to friday, from 9:00 to 12:00 am and from 2:00 to 7:00 pm (french hour)

**BEFORE CALLING** make sure you have the followings:

- Receiver Model: TouchBox 2
- Satellite received : _____

In a constant preoccupation to improve our products, could you please send us back the quality questionnaire (postage refunded on request). If you send us back the questionnaire, it gives you 3 months of additional guarantee (parts only).

# CERTIFICATE OF GUARANTEE

The TouchBox 2 receiver is guaranteed one year parts and labour. In the event of a breakdown, the transport charges outward are the customer responsibility; the costs carriage back is our responsibility.

To be valid, the certificate of guarantee must duly be filled and send back with the invoice photocopy or the sales slip.

Réf. du matériel: TouchBOX2

Date of purchase: _____ Serial number: _____

Address : SAV Métronic, BP 56, La Tombe, 37320 Esvres sur Indre, FRANCE
email: hotline@metronic.com

# CHANNELS GUIDE

**Hotbird----------**

| N° | Name | SR - Freq - Pol |
|---|---|---|
| 1 | RAI1 | 11766 V 27500 |
| 2 | RAI2 | 11766 V 27500 |
| 3 | RAI3 | 11766 V 27500 |
| 4 | Retequattro | 11919 V 27500 |
| 5 | Canale 5 | 11919 V 27500 |
| 6 | Italia 1 | 11919 V 27500 |
| 7 | RaiMed | 11766 V 27500 |
| 8 | Rai Edu1 | 11804 V 27500 |
| 9 | RaiEdu2 | 11766 V 27500 |
| 10 | RaiUtile | 11804 V 27500 |
| 11 | RaiSportSat | 11804 V 27500 |
| 12 | RaiNotizie24 | 11804 V 27500 |
| 13 | RaiDoc | 11804 V 27500 |
| 14 | 4fun.TV | 10719 V 27500 |
| 15 | EWTN | 10723 H 29900 |
| 16 | Geo TV | 10723 H 29900 |
| 17 | Sony | 10723 H 29900 |
| 18 | Mediatel | 10949 V 27500 |
| 19 | Tele Lumiere | 10949 V 27500 |
| 20 | MTA INTL | 10723 H 29900 |
| 21 | Sun KTV | 10949 V 27500 |
| 22 | Maharishi | 10949 V 27500 |
| 23 | Vectone Urdu | 10949 V 27500 |
| 24 | Vectone Bangla | 10949 V 27500 |
| 25 | Sun TV | 10949 V 27500 |
| 26 | Casino Channel | 10949 V 27500 |
| 27 | Vectone Tamil | 10949 V 27500 |
| 28 | Vectone Hindi | 10949 V 27500 |
| 29 | TRT INT | 10957 H 04340 |
| 30 | SKY Prima Fila | 10990 V 27500 |
| 31 | CCTV9 | 11034 V 27500 |
| 32 | Euronews france | 11034 V 27500 |
| 33 | God TV | 11034 V 27500 |
| 34 | Beur TV | 11034 V 27500 |
| 35 | RTR-Planet | 11034 V 27500 |
| 36 | TFJ | 11034 V 27500 |
| 37 | VOX CH | 11054 H 27500 |
| 38 | NBC | 11054 H 27500 |
| 39 | ZDF | 11054 H 27500 |
| 40 | RTL Television | 11054 H 27500 |
| 41 | RTL CH | 11054 H 27500 |
| 42 | ARTE GERMAN 1 | 11060 V 06510 |
| 43 | ARTE FRENCH 1 | 11060 V 06510 |
| 44 | Kurdsat | 11096 H 27500 |
| 45 | CNL New Life Cha | 11096 H 27500 |
| 46 | TV 5 - FBS | 11137 H 27500 |
| 47 | TV 5 Europe | 11137 H 27500 |
| 48 | Roma Uno | 11137 H 27500 |
| 49 | Videolook | 11137 H 27500 |
| 50 | Kurdistan TV | 11137 H 27500 |
| 51 | TBNE | 11137 H 27500 |
| 52 | Videolina | 11137 H 27500 |
| 53 | Telegenova | 11137 H 27500 |
| 54 | RTB | 11137 H 27500 |
| 55 | starMarket | 11137 H 27500 |
| 56 | ELITE SHOPPING | 11200 V 27500 |
| 57 | Sailing Channel | 11200 V 27500 |
| 58 | NOELLO SAT | 11200 V 27500 |
| 59 | CardMania TV | 11200 V 27500 |
| 60 | SuperPippa | 11200 V 27500 |
| 61 | ODEON SAT | 11200 V 27500 |
| 62 | TAXI channel | 11200 V 27500 |
| 63 | TLC SAT | 11200 V 27500 |

| N° | Name | SR - Freq - Pol |
|---|---|---|
| 64 | STARSAT | 11200 V 27500 |
| 65 | PIEMONTE SAT | 11200 V 27500 |
| 66 | ROMA SAT | 11200 V 27500 |
| 67 | AL HAYAT | 11200 V 27500 |
| 68 | PUNTO SAT | 11200 V 27500 |
| 69 | Olisat VV Cont | 11304 H 27500 |
| 70 | Olisat Mundovisi | 11304 H 27500 |
| 71 | Video Mediterran | 11304 H 27500 |
| 72 | Olisat Cubavisio | 11304 H 27500 |
| 73 | TV5 | 11338 V 05632 |
| 74 | TVN | 11408 V 27500 |
| 75 | TVN Siedem | 11408 V 27500 |
| 76 | MANGO 24 | 11408 V 27500 |
| 77 | TVN METEO | 11408 V 27500 |
| 78 | TVN TURBO | 11408 V 27500 |
| 79 | Polsat 1 | 11412 H 06198 |
| 80 | Polsat 2 | 11412 H 06198 |
| 81 | DW-TV | 11604 H 27500 |
| 82 | tv.nrw | 11604 H 27500 |
| 83 | VIVA polska | 11604 H 27500 |
| 84 | ARD Das Erste | 11604 H 27500 |
| 85 | RTL 2 CH | 11604 H 27500 |
| 86 | Super RTL CH | 11604 H 27500 |
| 87 | TV ROMANIA | 11623 V 27500 |
| 88 | Chai TV | 11623 V 27500 |
| 89 | 102.5 HIT Ch | 11623 V 27500 |
| 90 | CANAL CLUB | 11623 V 27500 |
| 91 | ITALIA CLUB | 11623 V 27500 |
| 92 | 123SAT/69XTV | 11623 V 27500 |
| 93 | Bloomberg Europe | 11642 H 27500 |
| 94 | Bloomberg German | 11642 H 27500 |
| 95 | Bloomberg Englis | 11642 H 27500 |
| 96 | Miracle TV | 11642 H 27500 |
| 97 | EDTV | 11746 H 27500 |
| 98 | EDTV SPORT | 11746 H 27500 |
| 99 | EDTV BUSINESS | 11746 H 27500 |
| 100 | PMC | 11746 H 27500 |
| 101 | EDTV DRAMA | 11746 H 27500 |
| 102 | Senato | 11766 V 27500 |
| 103 | TVE INTERNACIONA | 11785 H 27500 |
| 104 | CANAL 24 HORAS | 11785 H 27500 |
| 105 | TVE INTER. ASIA | 11785 H 27500 |
| 106 | RaiNettunoSat1 | 11804 V 27500 |
| 107 | RaiNettunoSat2 | 11804 V 27500 |
| 108 | Camera Deputati | 11804 V 27500 |
| 109 | SAT2000 | 11804 V 27500 |
| 110 | Sport Promo | 11843 V 27500 |
| 111 | HSE | 11900 H 27500 |
| 112 | ORT-I | 11938 H 27500 |
| 113 | DAN SS MUSIC +49 | 11938 H 27500 |
| 114 | SKY On Air | 11977 H 27500 |
| 115 | IQRAA - ARABESQU | 12015 H 27500 |
| 116 | MA3 | 12015 H 27500 |
| 117 | FUTURE TV - ARAB | 12015 H 27500 |
| 118 | Telesierra | 12092 H 27500 |
| 119 | HB CHANNEL | 12111 V 27500 |
| 120 | ARM 1 | 12111 V 27500 |
| 121 | Made In Italy | 12111 V 27500 |
| 122 | Ceramicanda | 12111 V 27500 |
| 123 | AL JAZEERA | 12111 V 27500 |
| 124 | UNOSAT | 12111 V 27500 |
| 125 | Coming Soon TV | 12111 V 27500 |
| 126 | MediterraneoSat | 12111 V 27500 |
| 127 | GAY.TV | 12111 V 27500 |
| 128 | DunaTV | 12149 V 27500 |

| N° | Name | SR - Freq - Pol |
|---|---|---|
| 129 | TV7 Tunis | 12149 V 27500 |
| 130 | Khabar TV | 12149 V 27500 |
| 131 | ChatGameTV | 12149 V 27500 |
| 132 | TizianaSat | 12149 V 27500 |
| 133 | LIDER TV AZE | 12149 V 27500 |
| 134 | CCTV | 12169 H 27500 |
| 135 | BALKANIA TV | 12188 V 27500 |
| 136 | HIGH TV | 12188 V 27500 |
| 137 | RTS SAT | 12188 V 27500 |
| 138 | TV MAGIC | 12188 V 27500 |
| 139 | O-6 TV | 12188 V 27500 |
| 140 | ERT SAT | 12188 V 27500 |
| 141 | EXTRA TV | 12188 V 27500 |
| 142 | TELEASTY | 12188 V 27500 |
| 143 | MKTV | 12188 V 27500 |
| 144 | FASHION | 12245 H 27500 |
| 145 | ADJARA TV | 12245 H 27500 |
| 146 | DCTV-german | 12265 V 27500 |
| 147 | DCTV-english | 12265 V 27500 |
| 148 | DCTV-italy | 12265 V 27500 |
| 149 | DCTV-turkish | 12265 V 27500 |
| 150 | DCTV-spanish | 12265 V 27500 |
| 151 | DCTV-french | 12265 V 27500 |
| 152 | DCTV-portuguese | 12265 V 27500 |
| 153 | NAPOLI INT. | 12303 V 27500 |
| 154 | MAGIC | 12303 V 27500 |
| 155 | COUNTDOWN | 12303 V 27500 |
| 156 | ITALIAN MUSIC | 12303 V 27500 |
| 157 | OASI.TV | 12303 V 27500 |
| 158 | DANCE TV | 12303 V 27500 |
| 159 | SAT8 | 12303 V 27500 |
| 160 | TV Puls | 12322 H 27500 |
| 161 | Info/Teleuniwers | 12360 H 27500 |
| 162 | PilotTV | 12360 H 27500 |
| 163 | Telepace | 12380 V 27500 |
| 164 | Syria Satellite | 12380 V 27500 |
| 165 | SAT 7 | 12380 V 27500 |
| 166 | Abu Dhabi TV | 12380 V 27500 |
| 167 | RTV Montenegro | 12380 V 27500 |
| 168 | ASB | 12380 V 27500 |
| 169 | Jordan TV | 12380 V 27500 |
| 170 | SFi | 12399 H 27500 |
| 171 | EbS | 12476 H 27500 |
| 172 | metv | 12476 H 27500 |
| 173 | LibertyTV.com | 12476 H 27500 |
| 174 | 2M Maroc | 12476 H 27500 |
| 175 | SET | 12520 V 27500 |
| 176 | SARDEGNA UNO | 12520 V 27500 |
| 177 | ITV | 12520 V 27500 |
| 178 | Jaam E Jam | 12520 V 27500 |
| 179 | TAPESH | 12520 V 27500 |
| 180 | PUGLIA CHANNEL | 12520 V 27500 |
| 181 | IPN | 12520 V 27500 |
| 182 | BENI CULTURALI | 12520 V 27500 |
| 183 | MEDIOLANUM | 12540 H 27500 |
| 184 | Nile TV Internat | 12540 H 27500 |
| 185 | Nile News | 12540 H 27500 |
| 186 | Bulgaria TV | 12540 H 27500 |
| 187 | 24ore.tv | 12558 V 27500 |
| 188 | OPENET.TV | 12558 V 27500 |
| 189 | TELE PADRE PIO | 12558 V 27500 |
| 190 | ANN | 12597 V 27500 |
| 191 | EuroNews | 12597 V 27500 |
| 192 | Al Arabiya | 12597 V 27500 |
| 193 | BBC World | 12597 V 27500 |

| N° | Name | SR - Freq - Pol |
|---|---|---|
| 194 | Sharjah | 12654 H 27500 |
| 195 | Qatar | 12654 H 27500 |
| 196 | Saudi 1 | 12654 H 27500 |
| 197 | Kuwait | 12654 H 27500 |
| 198 | Libya | 12654 H 27500 |
| 199 | Oman | 12654 H 27500 |
| 200 | ESC | 12654 H 27500 |
| 201 | Iraq | 12654 H 27500 |
| 202 | Al manar | 12654 H 27500 |
| 203 | E-TV | 12673 V 27500 |
| 204 | Emi.Li TV | 12673 V 27500 |
| 205 | Thai TV5 | 12673 V 27500 |
| 206 | 3ABN | 12673 V 27500 |
| 207 | Tv Moda | 12673 V 27500 |
| 208 | Studio Europa | 12673 V 27500 |
| 209 | Playlist Italia | 12673 V 27500 |
| 210 | Telemarket | 12673 V 27500 |
| 211 | GAME NETWORK | 12673 V 27500 |
| 212 | PASSIONS | 12692 H 27500 |
| 213 | ONYX | 12692 H 27500 |
| 214 | AB SAT PROMO | 12692 H 27500 |
| 215 | SKY TG 24 | 12713 V 27500 |
| 216 | Live ShowTV | 11623 V 27500 |
| 217 | SEXY Cine TV | 11623 V 27500 |
| 218 | ULTRA BLUE TV | 11623 V 27500 |
| 219 | Italiasat | 12092 H 27500 |
| 220 | Erotic TV | 12092 H 27500 |
| 221 | SEXY SAT | 12245 H 27500 |
| 222 | PLEASURE TV | 12303 V 27500 |
| 223 | BLU LINE TV | 12303 V 27500 |
| 224 | Xstream | 12476 H 27500 |
| **Astra19----------** | | |
| 225 | TV TRWAM | 10833 H 22000 |
| 226 | Bibel TV | 10833 H 22000 |
| 227 | RAZE TV | 10833 H 22000 |
| 228 | Tango TV | 10833 H 22000 |
| 229 | Al Jazeera | 11568 V 22000 |
| 230 | CANAL ALGERIE | 11568 V 22000 |
| 231 | TV 5 | 11568 V 22000 |
| 232 | ESC1 - EGYPT | 11568 V 22000 |
| 233 | RAI 1 | 11568 V 22000 |
| 234 | DW-TV | 11568 V 22000 |
| 235 | RTPI | 11568 V 22000 |
| 236 | TV7 | 11568 V 22000 |
| 237 | ARTE | 11568 V 22000 |
| 238 | 2M Maroc | 11568 V 22000 |
| 239 | DW-TV | 11597 V 22000 |
| 240 | Sky News Intl | 11597 V 22000 |
| 241 | TVEi | 11597 V 22000 |
| 242 | RTM MAROC | 11597 V 22000 |
| 243 | TVC INT. | 11686 V 22000 |
| 244 | ANDALUCÍA TV | 11686 V 22000 |
| 245 | EUSKADI TV | 11686 V 22000 |
| 246 | TM SAT/LAOTRA | 11686 V 22000 |
| 247 | TV GALICIA | 11686 V 22000 |
| 248 | MTV Central | 11740 V 27500 |
| 249 | Travel | 11778 V 27500 |
| 250 | CNN Int. | 11778 V 27500 |
| 251 | EURONEWS | 11817 V 27500 |
| 252 | Das Erste | 11837 H 27500 |
| 253 | Bayerisches FS | 11837 H 27500 |
| 254 | hessen fernsehen | 11837 H 27500 |
| 255 | arte | 11837 H 27500 |

| N° | Name | SR- Freq - Pol |
|---|---|---|
| 256 | SR Fernsehen S? | 11837 H 27500 |
| 257 | WDR Köln | 11837 H 27500 |
| 258 | BR-alpha | 11837 H 27500 |
| 259 | SÜDWEST BW | 11837 H 27500 |
| 260 | Phoenix | 11837 H 27500 |
| 261 | KTO | 11895 V 27500 |
| 262 | ZDF | 11954 H 27500 |
| 263 | ZDFinfokanal | 11954 H 27500 |
| 264 | ZDFdokukanal | 11954 H 27500 |
| 265 | ZDFtheaterkanal | 11954 H 27500 |
| 266 | 3sat | 11954 H 27500 |
| 267 | KiKa | 11954 H 27500 |
| 268 | EuroNews | 11954 H 27500 |
| 269 | Eurosport | 11954 H 27500 |
| 270 | ProSieben Schwei | 12051 V 27500 |
| 271 | ProSieben Austri | 12051 V 27500 |
| 272 | Kabel 1 Schweiz | 12051 V 27500 |
| 273 | Kabel 1 Austria | 12051 V 27500 |
| 274 | SAT.1 A | 12051 V 27500 |
| 275 | rbb Berlin | 12109 H 27500 |
| 276 | rbb Brandenburg | 12109 H 27500 |
| 277 | MDR FERNSEHEN | 12109 H 27500 |
| 278 | EinsMuXx | 12109 H 27500 |
| 279 | EinsFestival | 12109 H 27500 |
| 280 | EinsExtra | 12109 H 27500 |
| 281 | SÜDWEST RP | 12109 H 27500 |
| 282 | NDR FS MV | 12109 H 27500 |
| 283 | TV.BERLIN | 12148 H 27500 |
| 284 | lastminute.de | 12148 H 27500 |
| 285 | TV TRAVEL SHOP | 12148 H 27500 |
| 286 | SAT.1-CH | 12148 H 27500 |
| 287 | hollywood †cin | 12148 H 27500 |
| 288 | VIC-TV NET DE1 | 12148 H 27500 |
| 289 | GOD Channel | 12148 H 27500 |
| 290 | RTL Televisio | 12188 H 27500 |
| 291 | RTL2 | 12188 H 27500 |
| 292 | Super RTL? | 12188 H 27500 |
| 293 | VOX | 12188 H 27500 |
| 294 | RTL Shop | 12188 H 27500 |
| 295 | FRANCE 5 | 12207 V 27500 |
| 296 | LCP | 12207 V 27500 |
| 297 | BTV | 12226 H 27500 |
| 298 | MTV2 Pop Channel | 12226 H 27500 |
| 299 | L1MBURG | 12226 H 27500 |
| 300 | RTL Austria | 12226 H 27500 |
| 301 | VOX Austria | 12226 H 27500 |
| 302 | RTL2 Austria | 12226 H 27500 |
| 303 | Super RTL A | 12226 H 27500 |
| 304 | ZIK / XXL | 12285 V 27500 |
| 305 | BBC WORLD | 12285 V 27500 |
| 306 | FASHION-TV | 12285 V 27500 |
| 307 | ProSieben | 12480 V 27500 |
| 308 | KABEL1 | 12480 V 27500 |
| 309 | NEUN LIVE Tele | 12480 V 27500 |
| 310 | DSF | 12480 V 27500 |
| 311 | HSE24 | 12480 V 27500 |
| 312 | SAT.1 | 12480 V 27500 |
| 313 | N24 | 12480 V 27500 |
| 314 | TELE 5 | 12480 V 27500 |
| 315 | Sonnenklar TV | 12480 V 27500 |
| 316 | RTL TELE Letzebu | 12552 V 22000 |
| 317 | QVC GERMANY | 12552 V 22000 |
| 318 | VIVA PLUS | 12552 V 22000 |
| 319 | Bloomberg TV Ger | 12552 V 22000 |
| 320 | Chamber TV | 12552 V 22000 |

| N° | Name | SR - Freq - Pol |
|---|---|---|
| 321 | BVN | 12574 H 22000 |
| 322 | RTBF SAT | 12610 V 22000 |
| 323 | CNBC Europe | 12610 V 22000 |
| 324 | TV5 Europe | 12610 V 22000 |
| 325 | Club Teleachat | 12610 V 22000 |
| 326 | LibertyTV.com | 12610 V 22000 |
| 327 | TV6 | 12610 V 22000 |
| 328 | Wishline | 12610 V 22000 |
| 329 | Bahn TV | 12633 H 22000 |
| 330 | K-TV | 12633 H 22000 |
| 331 | XXP | 12633 H 22000 |
| 332 | rhein main tv | 12633 H 22000 |
| 333 | n-tv | 12670 V 22000 |
| 334 | VIVA | 12670 V 22000 |
| 335 | TW1 | 12692 H 22000 |
| 336 | OTTO SHOP | 12460 H 27500 |
| **Astra 28----------** | | |
| 337 | BBC 1 London | 10773 H 22000 |
| 338 | BBC 2 England | 10773 H 22000 |
| 339 | BBC NEWS 24 | 10773 H 22000 |
| 340 | ETV | 10773 H 22000 |
| 341 | BBC TES 3 | 10773 H 22000 |
| 342 | CBBC Channel | 10773 H 22000 |
| 343 | CBeebies | 10773 H 22000 |
| 344 | BBC 1 NI | 10773 H 22000 |
| 345 | price-drop.tv | 11954 H 27500 |
| 346 | Screenshop | 11954 H 27500 |
| 347 | TV Travelshop | 11954 H 27500 |
| 348 | TV Travelshop 2 | 11954 H 27500 |
| 349 | Broadband TV | 11954 H 27500 |
| 350 | Ideal World | 12032 H 27500 |
| 351 | ITV News | 12032 H 27500 |
| 352 | QVC | 12032 H 27500 |
| 353 | QVC TSVNOW | 12032 H 27500 |
| 354 | bid-up.tv | 12032 H 27500 |
| 355 | CNN | 12051 V 27500 |
| 356 | Travel Channel | 12051 V 27500 |
| 357 | Travel Deals | 12051 V 27500 |
| 358 | BBC PARL'MNT | 12129 V 27500 |
| 359 | S4C~ Digidol | 12129 V 27500 |
| 360 | S4C~2 | 12129 V 27500 |
| 361 | Vitality | 12129 V 27500 |
| 362 | Create & Craft | 12129 V 27500 |
| 363 | Sky News | 12207 V 27500 |
| 364 | Sky News | 12207 V 27500 |
| 365 | Sky News | 12207 V 27500 |
| 366 | Sky News UK | 12207 V 27500 |
| 367 | Sky News Eire | 12207 V 27500 |
| 368 | STAR News | 12284 V 27500 |
| 369 | Boomerang | 12324 V 27500 |
| 370 | TV SHOP | 12344 H 27500 |
| 371 | Reality TV | 12344 H 27500 |
| 372 | FO2 | 12344 H 27500 |
| 373 | Factory Outlet | 12344 H 27500 |
| 374 | TVWarehouse.. | 12344 H 27500 |
| 375 | Shop America | 12344 H 27500 |
| 376 | TV Warehouse | 12344 H 27500 |
| 377 | Shop 24/7 | 12344 H 27500 |
| 378 | JML Direct | 12344 H 27500 |
| 379 | Game Network | 12344 H 27500 |
| 380 | YES | 12344 H 27500 |
| 381 | Shop Smart | 12344 H 27500 |
| 382 | Community | 12382 H 27500 |

# CHANNELS GUIDE

| N° | Name | SR- Freq - Pol |
|---|---|---|
| 383 | UCB TV | 12402 V 27500 |
| 384 | ATN | 12402 V 27500 |
| 385 | Overload | 12402 V 27500 |
| 386 | Teletext Holiday | 12422 H 27500 |
| 387 | Going Places | 10920 H 22000 |
| 388 | PCNE Chinese | 11565 V 27500 |
| 389 | TLM(Browser) | 10861 H 22000 |
| 390 | The Betting Zone | 10861 H 22000 |
| 391 | VOLV4 | 12012 V 27500 |
| 392 | BADA4 | 12012 V 27500 |
| 393 | NISS4 | 12012 V 27500 |
| 394 | TWFR4 | 12460 H 27500 |
| 395 | NIPV | 12246 V 27500 |
| 396 | ETV2 | 10802 H 22000 |
| 397 | BBC 1 Wales | 10802 H 22000 |
| 398 | BBC 2W | 10802 H 22000 |
| 399 | BBC 1 Scotland | 10802 H 22000 |
| 400 | BBC 2 Scotland | 10802 H 22000 |
| 401 | BBC 2 NI | 10802 H 22000 |
| 402 | T4 DEV-4 | 10847 V 22000 |
| 403 | BBC 1 W Mids | 10788 V 22000 |
| 404 | BBC 1 N West | 10788 V 22000 |
| 405 | BBC 1 EYks&L | 10788 V 22000 |
| 406 | BBC 1 Yorks | 10788 V 22000 |
| 407 | BBC 1 E Mids | 10788 V 22000 |
| 408 | BBC 1 East (E) | 10788 V 22000 |
| 409 | ETV5 | 10788 V 22000 |
| 410 | BBC 1 West | 10817 V 22000 |
| 411 | BBC 1 S East | 10817 V 22000 |
| 412 | BBC 1 South | 10817 V 22000 |
| 413 | BBC 1 S West | 10817 V 22000 |
| 414 | BBC 1 NE & C | 10817 V 22000 |
| 415 | BBC 1 Oxford | 10817 V 22000 |
| 416 | ETV6 | 10817 V 22000 |
| 417 | POP | 11426 V 27500 |
| 418 | The Vault | 11426 V 27500 |
| 419 | nation277 | 11426 V 27500 |
| 420 | L!VE TV | 11426 V 27500 |
| 421 | POP Plus | 11426 V 27500 |
| 422 | Simply Home | 11488 V 27500 |
| 423 | Simply Ideas | 11488 V 27500 |
| 424 | Rapture TV | 11488 V 27500 |
| 425 | Simply Shop. | 11488 V 27500 |
| 426 | JobsTV | 11488 V 27500 |
| 427 | GayDateTV | 11488 V 27500 |
| 428 | Chart Show TV | 11488 V 27500 |
| 429 | Open Access | 11488 V 27500 |
| 430 | Classic FM TV | 11488 V 27500 |
| 431 | BestDirect+ | 11584 H 27500 |
| 432 | Best Direct | 11584 H 27500 |
| 433 | Auctionworld | 11584 H 27500 |
| 434 | Dating Channel | 11584 H 27500 |
| 435 | Shop on TV | 11546 H 27500 |
| 436 | Thane Direct | 11546 H 27500 |
| 437 | Shoppingworld | 11546 H 27500 |
| 438 | Stop + Shop | 11546 H 27500 |
| 439 | i Sports TV | 11546 H 27500 |
| 440 | Thomas Cook | 11526 V 27500 |
| 441 | Entertainment | 11526 V 27500 |
| 442 | Motors TV | 11526 V 27500 |
| 443 | SAB TV | 11388 H 27500 |
| 444 | Performance | 11388 H 27500 |
| 445 | channel U | 11388 H 27500 |
| 446 | FO3 | 11388 H 27500 |
| 447 | txt me | 11388 H 27500 |

| N° | Name | SR- Freq - Pol |
|---|---|---|
| 448 | ACTV | 11388 H 27500 |
| 449 | Chat Box | 11388 H 27500 |
| 450 | Golf Channel | 11388 H 27500 |
| 451 | E&M TV | 11388 H 27500 |
| 452 | Record TV | 11388 H 27500 |
| 453 | Game In TV | 11388 H 27500 |
| 454 | EDTV1 | 11642 V 27500 |
| 455 | EDTV Sport | 11642 V 27500 |
| 456 | EDTV Business | 11642 V 27500 |
| 457 | Vectone Bangla | 11642 V 27500 |
| 458 | VECTONE Urdu | 11642 V 27500 |
| 459 | VECTONE Tamil | 11642 V 27500 |
| 460 | VECTONE India | 11642 V 27500 |
| 461 | Extreme Sports | 11680 V 27500 |
| 462 | EuroNews | 11680 V 27500 |
| 463 | GOD Channel | 11680 V 27500 |
| 464 | GOD REVIVAL | 11680 V 27500 |
| 465 | Life TV | 11680 V 27500 |
| 466 | TBN Europe | 11680 V 27500 |
| 467 | OBE | 11680 V 27500 |
| 468 | HollywoodTV | 11680 V 27500 |
| 469 | GOD 2 | 11680 V 27500 |
| 470 | mta-muslim tv | 11661 H 27500 |
| 471 | BEN | 11661 H 27500 |
| 472 | Abu Dhabi TV | 11661 H 27500 |
| 473 | CCTV-9 | 11661 H 27500 |
| 474 | TelSell | 11623 H 27500 |
| 475 | Wonderful | 11623 H 27500 |
| 476 | revelation | 11623 H 27500 |
| 477 | Classics TV | 11623 H 27500 |
| 478 | Information TV | 11623 H 27500 |
| 479 | g3w8 | 11623 H 27500 |
| 480 | FRIENDLY TV | 11623 H 27500 |
| 481 | Fashion TV | 11623 H 27500 |
| **AtlanticBird----------** | | |
| 482 | BRTV | 12543 H 27500 |
| 483 | GCPE 1 | 12543 H 27500 |
| 484 | GCPE 2 | 12543 H 27500 |
| **Eutelsat W2----------** | | |
| 485 | SNAI SAT | 12608 H 27500 |
| 486 | SERVICE 5 | 12608 H 27500 |
| 487 | LA7 | 12630 H 6111 |
| 488 | MTV ITALIA | 12630 H 6111 |
| 489 | RTK PRISHTINA | 12633 V 4883 |
| 490 | Adjara tv | 12675 V 4340 |
| 491 | TOP CHANNEL | 11449 H 16000 |
| **Sirius----------** | | |
| 492 | NOVY KANAL | 11766 H 27500 |
| 493 | TET | 11766 H 27500 |
| 494 | ENTER-FILM | 11766 H 27500 |
| 495 | INTER | 11766 H 27500 |
| 496 | ENTER | 11766 H 27500 |
| 497 | TRK UKRAINA | 11766 H 27500 |
| 498 | QVC | 12303 H 25547 |
| 499 | Moscow Open Worl | 12380 H 27500 |
| 500 | RTL9 | 11370 V 3260 |

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| N° | Name | SR- Freq - Pol |
|---|---|---|
| **EutelsatW3----------** | | |
| 501 | TV Polonia | 11175 V 27500 |
| 502 | OCCA 1 W3 | 11283 V 27500 |
| 503 | M6 Suisse | 11283 V 27500 |
| **Hispasat1ABC----------** | | |
| 504 | SOL PORT | 11535 V 24500 |
| 505 | TV Galicia | 11811 V 27500 |
| 506 | Via Local | 11932 H 27500 |
| 507 | Movida Local | 11932 H 27500 |
| 508 | Max Local | 11932 H 27500 |
| 509 | Canal 7 Tv | 11932 H 27500 |
| 510 | REDE RECORD | 11932 H 27500 |
| 511 | Tu Farmacia Tv | 11932 H 27500 |
| 512 | Popular Tv | 11932 H 27500 |
| 513 | Gigashopping | 11932 H 27500 |
| 514 | Vision Local | 11932 H 27500 |
| 515 | Programação | 12012 V 27500 |
| 516 | ATLAS SERVICIO A | 11731 H 28126 |
| 517 | Canal 4 | 11731 H 28126 |
| 518 | NUEVA ERA | 11731 H 28126 |
| 519 | EHS | 11731 H 28126 |
| 520 | TVE INTERNACIONA | 12092 V 27500 |
| 521 | CNBC | 12092 V 27500 |
| 522 | TBN ENLACE | 12092 V 27500 |
| **Arabast2/3A----------** | | |
| 523 | Bahrain TV | 11747 V 27500 |
| 524 | Saudi 1 | 11747 V 27500 |
| 525 | Kuwait | 11747 V 27500 |
| 526 | Libya | 11747 V 27500 |
| 527 | Sudan | 11747 V 27500 |
| 528 | Saudi 2 | 11747 V 27500 |
| 529 | Almajd TV | 11747 V 27500 |
| 530 | Oman | 11747 V 27500 |
| 531 | Eritrea | 11747 V 27500 |
| 532 | Iraq Media | 11747 V 27500 |
| 533 | AlManar | 11785 V 27500 |
| 534 | Future | 11785 V 27500 |
| 535 | LBCI | 11785 V 27500 |
| 536 | Star Academy | 11785 V 27500 |
| 537 | TeleLiban | 11785 V 27500 |
| 538 | NBN | 11785 V 27500 |
| 539 | ALArabiya | 11785 V 27500 |
| 540 | NEW TV | 11785 V 27500 |
| 541 | channel 2 | 11785 V 27500 |
| 542 | MBC | 11785 V 27500 |
| 543 | Syria TV | 11938 V 27500 |
| 544 | Yemen TV | 11938 V 27500 |
| 545 | Sharjah tv | 11938 V 27500 |
| 546 | Algeria TV | 11938 V 27500 |
| 547 | Tunisia TV | 11938 V 27500 |
| 548 | Aljazeera TV | 11938 V 27500 |
| 549 | Mauritania TV | 11938 V 27500 |
| 550 | Morocco TV | 11938 V 27500 |
| 551 | Almustakilla | 11938 V 27500 |
| 552 | Jordan TV | 11938 V 27500 |
| **Turksat1C----------** | | |
| 553 | Cine5 | 11025 V 06510 |
| 554 | Gala | 11025 V 06510 |
| 555 | Viva | 11025 V 06510 |

| N° | Name | SR- Freq - Pol |
|---|---|---|
| 556 | Supersport | 11025 V 06510 |
| 557 | CNN Turk | 11584 V 08800 |
| 558 | Dream TV | 11584 V 08800 |
| 559 | Euro D | 11584 V 08800 |
| 560 | KANAL 7 | 11135 V 04444 |
| 561 | TRT 1 | 11096 V 27500 |
| 562 | TRT 2 | 11096 V 27500 |
| 563 | TRT INT | 11096 V 27500 |
| 564 | TRT 3 | 11096 V 27500 |
| 565 | TRT 4 | 11096 V 27500 |
| 566 | Service 1 | 11129 V 04268 |
| 567 | www.tgrt.com.tr | 11882 V 03400 |
| 568 | E TV ANTALYA | 12705 H 02400 |
| 569 | BRTK KKTC | 10968 V 04557 |
| 570 | STV | 11154 V 04557 |
| 571 | atv | 12633 V 04800 |
| 572 | yeni tv | 12638 V 02200 |

| N° | Name | SR- Freq - Pol |
|---|---|---|
| **Hotbird----------** | | |
| 1 | TPS & Vous | 10796 V 27500 |
| 2 | Le Mouv | 10796 V 27500 |
| 3 | France bleu | 10796 V 27500 |
| 4 | France Culture | 10796 V 27500 |
| 5 | France Info | 10796 V 27500 |
| 6 | France Inter | 10796 V 27500 |
| 7 | FIP | 10796 V 27500 |
| 8 | Hector | 10796 V 27500 |
| 9 | France Musiques | 10796 V 27500 |
| 10 | Beur FM | 10796 V 27500 |
| 11 | GAME AVENUE | 10796 V 27500 |
| 12 | Europe 1 | 10873 V 27500 |
| 13 | Europe 2 | 10873 V 27500 |
| 14 | RFM | 10873 V 27500 |
| 15 | RTL | 10873 V 27500 |
| 16 | NRJ | 10873 V 27500 |
| 17 | Radio Classique | 10873 V 27500 |
| 18 | Chérie FM | 10873 V 27500 |
| 19 | Fun Radio | 10873 V 27500 |
| 20 | RTL 2 | 10873 V 27500 |
| 21 | RMC | 10873 V 27500 |
| 22 | Rire&Chansons | 10873 V 27500 |
| 23 | MFM | 10873 V 27500 |
| 24 | Nostalgie | 10873 V 27500 |
| 25 | HITWEST | 10873 V 27500 |
| 26 | GUIDE | 10873 V 27500 |
| 27 | BANDIAGARA | 10873 V 27500 |
| 28 | Jazz Moderne | 10911 V 27500 |
| 29 | Jazz | 10911 V 27500 |
| 30 | Blues | 10911 V 27500 |
| 31 | Relaxation | 10911 V 27500 |
| 32 | Contemporain | 10911 V 27500 |
| 33 | Opéra | 10911 V 27500 |
| 34 | Baroque | 10911 V 27500 |
| 35 | Symphonies | 10911 V 27500 |
| 36 | Grand Classique | 10911 V 27500 |
| 37 | Les Tubes Fran? | 10911 V 27500 |
| 38 | RFI | 10911 V 27500 |
| 39 | Skyrock | 10911 V 27500 |
| 40 | Radio Courtoisie | 10911 V 27500 |
| 41 | Contact FM | 10911 V 27500 |
| 42 | Zi-One | 10911 V 27500 |
| 43 | BFM | 10911 V 27500 |
| 44 | PLAYIN TV | 10911 V 27500 |
| 45 | Météo Express | 10911 V 27500 |
| **Astra19----------** | | |
| 46 | CSAT RADIOS | 12207 V 27500 |
| 47 | CANALSAT RADIOS | 12207 V 27500 |
| 48 | RADIOS 2 | 12207 V 27500 |
| 49 | RADIOS 3 | 12207 V 27500 |
| 50 | RF | 12207 V 27500 |
| 51 | FRANCE MUSIQUES | 12207 V 27500 |
| 52 | FIP | 12207 V 27500 |
| 53 | France INFO | 12207 V 27500 |
| 54 | France INTER | 12207 V 27500 |
| 55 | France BLEU | 12207 V 27500 |
| 56 | RFI INT | 12207 V 27500 |
| 57 | RADIO CLASSIQUE | 12207 V 27500 |
| 58 | EUROPE 1 | 12207 V 27500 |
| 59 | RMC | 12207 V 27500 |

| N° | Name | SR- Freq - Pol |
|---|---|---|
| 60 | RTL | 12207 V 27500 |
| 61 | RIRE ET CHANSONS | 12207 V 27500 |
| 62 | SUD RADIO | 12207 V 27500 |
| 63 | M FM | 12207 V 27500 |
| 64 | TSF | 12207 V 27500 |
| 65 | NOSTALGIE | 12207 V 27500 |
| 66 | BFM | 12207 V 27500 |
| 67 | PARIS JAZZ | 12207 V 27500 |
| 68 | NRJ | 12207 V 27500 |
| 69 | EUROPE 2 | 12207 V 27500 |
| 70 | RTL 2 | 12207 V 27500 |
| 71 | SKYROCK | 12207 V 27500 |
| 72 | FUN RADIO | 12207 V 27500 |
| 73 | LE MOUV | 12207 V 27500 |
| 74 | RADIO NOVA | 12207 V 27500 |
| 75 | RADIO FG | 12207 V 27500 |
| 76 | VIBRATION | 12207 V 27500 |
| 77 | CONTACT FM | 12207 V 27500 |
| 78 | RADIO LATINA | 12207 V 27500 |
| 79 | RFM | 12207 V 27500 |
| 80 | CHERIE FM | 12207 V 27500 |
| 81 | ALOUETTE | 12207 V 27500 |
| 82 | VOLTAGE | 12207 V 27500 |
| 83 | OUI FM | 12207 V 27500 |
| 84 | ADO | 12207 V 27500 |
| 85 | COULEUR 3 | 12207 V 27500 |
| 86 | RFI MUSIQUE | 12207 V 27500 |
| 87 | RADIO NOTRE-DAME | 12207 V 27500 |
| 88 | RADIO ALPHA | 12207 V 27500 |
| 89 | RCJ / SHALOM | 12207 V 27500 |
| 90 | BEUR FM | 12207 V 27500 |
| 91 | MEDIA TROPICAL | 12207 V 27500 |
| 92 | AFRICA N1 | 12207 V 27500 |
| 93 | MEDI 1 | 12207 V 27500 |
| 94 | France CULTURE | 12207 V 27500 |
| 95 | RADIO INT 2 | 12207 V 27500 |
| 96 | RADIO INT | 12207 V 27500 |
| 97 | RADIO INT 3 | 12207 V 27500 |
| 98 | WRN | 12207 V 27500 |

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